YEARBOOK of THE HEATHER SOCIETY





2003

40th Anniversary

1963-2003

THE HEATHER SOCIETY

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Affiliated societies Nederlandse Heidervereniging 'Ericultura' Gesellschaft der Heidefreunde North American Heather Society

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FRONT COVER: The prototype for *Erica hybrasiliensis*! A mature tree of *Erica scoparia* subsp. *azorica*, more than 10m tall, by the old track above Caldeira de Cima on the north coast of São Jorge, The Azores (E. C. Nelson. 1993).

Yearbook of The Heather Society

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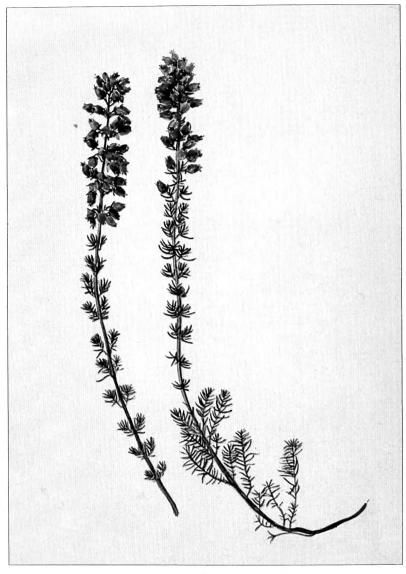


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Erica cinerea, bell heather; watercolour on paper. Reproduced by courtesy of the University of Bergen.

M. Bødtker

Heather paintings by Miranda Bødtker, with a note on her life and career

DAGFINN MOE

Museum of Botany, University of Bergen, Allegaten 41, N-5007 BERGEN, Norway.

Miranda Bødtker (1896–1996) was one of the foremost plant illustrators in Norway, and probably also in Scandinavia. She was educated at the Bergen School of Handicraft and Art (Bergens Kunsthaandverkskole, 1913–1916) followed by one year at Tekniska Skolan in Stockholm, Sweden. She became a teacher of design at the Bergen Kunsthaandverkskole in 1920, and kept this position until her retirement in 1966. In both her art and teaching activities, Miranda Bødtker used nature and the collections in local museums.

Miss Bødtker produced around 2,500 black-and-white ink-drawings of Miss Bødtker produced around 2,500 black-and-white ink-drawings of plants, handicrafts, and archaeological artifacts. She also painted more than a thousand aquarelles of plants, fishes, textiles and rock-carvings, and made several hundred copies of coloured wall-paintings from old wooden buildings around the harbour of Bergen. Her illustrations, both of plants and handicrafts, are very detailed – she frequently used magnifying lenses to study the smallest details. Her stylized illustrations of plants, insects, snails and fishes, used for design demonstration, are especially fine.

During her period as a teacher of design (from 1920 onwards), some of Miss Bødtker's works were shown at different exhibitions in Bergen, Trondheim and Oslo. A special collection of drawings of house-plants was exhibited at Bergen Museum (University of Bergen).

She participated in different field excursions in Norway and elsewhere in Scandinavia, eventually becoming an acknowledged specialist. Several

Scandinavia, eventually becoming an acknowledged specialist. Several professional scientists, particularly the botanists at institutes in Norway, have used her illustrations in their work. Thus, her illustrations of archaeological, botanical and zoological items have been published in numerous scientific and popular papers, in books and brochures, and as postcards. Although more than 40 papers by other authors are known to have been illustrated by

her, she herself published only a few papers.

While her earliest plant illustrations are from around 1920, most of Miranda Bødtker's plant portraits post-date 1930 when she began collaborating with Professor Rolf Nordhagen. She accompanied him during several field seasons, and illustrated living plants firstly for his Sikilsdalen og Norges fjellbeiter, and later for Norsk flora. The text of that flora was



Erica carnea, winter heath; watercolour on paper. Reproduced by courtesy of the University of Bergen.

finished in 1940, but the work of illustrating it was delayed several times, mainly because Professor Nordhagen moved from Bergen to take over the Chair of Botany at the University of Oslo. The final sections of the second volume of illustrations of Nordhagen's *Norsk flora* are currently in preparation; Miss Bødtker's black-and-white drawings of various members of the Ericaceae, including heathers, will be published in this volume.

Miss Miranda Bødtker was made an honorary member of the Norwegian Botanical Association in recognition of her work. In 1986 she was awarded The King's Medal of Merit in gold.

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Acknowledgement

The Heather Society is most grateful to the University of Bergen for permission to reproduce two of Miranda Bødtker's paintings. Greetings cards reproducing several of her paintings are available for purchase from the author.

Help! Four questions off my chest. [With three answers!]

COLIN D. ROGERS

Ebenezer Chapel, 121 Old Road, Tintwistle, Glossop, Derbyshire, SK13 1JZ.

CATSSSS

Catssas

Cats and heathers make poor bedfellows, a fact noted by few writers on heather gardening, and I suspect by no writers on cats. They can attack in so many ways. They spray into the side of mature plants. (Underhill (1990: 70) recommends pouring water over a plant newly contaminated by urine, but this requires the gardener to be on permanent watch which even the most obsessive might find impractical.) They scratch up (and worse) in the immediate vicinity of newly planted one- or two-year olds, attracted by the wonderful new mulch. They lie on a soft bed of foliage, staring disdainfully through the house windows at the gesticulating gardener inside, and leave a mature plant looking like a bird's nest or a youngster squashed beyond repair.

The shotgun solution (hinted at by the Proudleys (1982: 74)) seems a little drastic, though at least the plants would probably be unharmed. Other writers have suggested ring-fencing the whole garden against predators such as rabbits, dogs, or deer. Gardening and bird magazines contain adverts for sonic deterrents, one of which has the added advantage of exiling moles (presumably to a neighbour's garden). An even more ingenious device in this context makes a loud barking noise when movement is detected.

None of the above can help me. Why? Because they're our cats! Furthermore, I'm told they take precedence being even higher up the evolutionary scale than heathers. They've taken a particular liking to Calluna vulgaris 'Dark Beauty' – but then, haven't we all? I discovered, however, that far from this being a sign of superior discernment, it is a consequence of a colony of field mice in an adjoining dry-stone wall, the cats having spent several months waiting and hoping that the mice will one day unconditionally surrender and walk out.

surrender and walk out.

I'm not happy about either of two current solutions. The application of chemicals such as the slimy green 'Get Off' crystals might backfire if they are really anti-green (environmentally, that is); and currently two of my plants are individually encircled by wire netting – but this detracts from the view of the heather bed, which is in danger of looking like an abandoned allotment, and I am uncertain whether it might be adversely affected by corroding metal. Does anyone have a better solution?

Cats do seem to like heathers! Wendell Cottle (1995. Heather in the Napa Valley. *Heather news* **18** (2): 9) bemoaned the havoc wreaked by Buddy, and his "next door friend", Jasmine, two felines in Napa Valley, California.

... There seems to be something about heather which makes cats think they are invisible when they lie behind them. *Calluna vulgaris* 'Kirby White' and *Erica carnea* 'Winter Beauty' seem the best hiding varieties. However, Buddy is found quickly (weighing in at a muscular 13 pounds). Jasmine does a three-foot leap right onto the heather with perfect accuracy. This kind of hide-and-go-seek results in some brutal pruning. But that's not the worst of it. Heaths and heathers seem to be a positively heavenly place upon which a cat can take a power snooze (*E. carnea* 'Loughrigg' and *Calluna vulgaris* 'Wickwar Flame' are well suited to napping).

Cat games and cap naps are not the worst of it, though. A behavioral trait shared by felines (males and females) is to flop, roll on the back and wiggle as hard as possible. In this area, Buddy seems to be way ahead of Jasmine.

Donald Mackay (2001. Gardening with a cat. *Heather news* **24** (3): 26–27) added substantially to the tales of American cats and heathers, with the story of George, one of a pair (brother and sister) of almost feral kittens he found under the stone porch of his house. One day George, "utterly useless for mousing or petting purposes" and hitherto apparently untameable, surprised Donald who was weeding some new heathers – the cat jumped on his lap.

... The cat that had never before let human hand upon it now demanded human attention, mainly by nudging my weeding hand just as I was attempting some delicate extraction of a particularly pernicious weed. I showed him 'Robin', 'Irish Salmon' and 'Mousehole', but he had no interest in them. I told him 'Mousehole' is pronounced Muzzle, but he stalked off indignantly. He's no dog.

This turned out to be not a solitary occasion. Every time I started to weed, George would appear from nowhere ... and try to help. He seems to take more interest in callunas than in ericas but spent little attention on differences of foliage or flower colors. Finally I came to the conclusion he just liked lying on my lap ...

Thus Donald was obliged to progress from heather bed to heather bed using a crab-like movement so as not to disturb the cat in his lap. "This is definitely a three-way association", he concluded.

... Away from the heathers George is as distant as ever from me, but by himself he now shows much more interest in them than in me. In warm weather he lies among the heathers, usually curled in optimum fashion to benefit from the weeded spaces. Unlike Wendell Cottle's cats he shows no propensity for lying on the heathers nor like the Davis' cat to jump from plant to plant. Once in a while, however, I do see him raking the loosened earth, so he must like weeding.

There was another benefit – fewer chipmunk burrows and squirrel holes in the heather beds because the chipmunks and squirrels had moved to Donald's neighbors!

As for the Davis' jumping cat ... well that's another (shaggy dog) story (see *Heather news* no. 100)! It was (probably) a raccoon!

As for keeping cats and heathers apart, Wendell Cottle and I offer these (sometimes whimsical) suggestions.

1. Wendell wrote that he had ".. found a solution ... Rocks – big ones placed around the plants to be protected are effective about half the time. For the other half, you may as well beat yourself in the head with them." Seems a bit drastic, not to say ineffectual!

Jostein Liland in Norway recommended placing fist-sized stones between the heathers (Bulletin of The Heather Society 4 (11, Autumn 1990)).

- 2. Try this. Provide the cat with an alternative field-mice-viewing bed, such as a patch of catmint. Catmint, of course, thrives in lime-rich soil so it will have to be planted elsewhere than in a heather bed containing *Calluna*.
- 3. Make 'Dark Beauty' unattractive as a field-mice-viewing bed by carefully inserting numerous small pieces of very thorny twigs into the heather plant. This will mean that the cat will have to find a more comfortable spot and that you will have to remember that there are thorns in the heather! Sharply armed *Berberis* (especially such ones as *B. wilsoniae*) are good for this purpose, as I know from using them to discourage a neighbour's moggie from making its toilet in my heathers. Roses (but only the thorniest ones) and gooseberries likewise provide excellent cat-deterrent twigs.

Come to think of it, it would probably be best to spread the thorny twigs all over the heather bed. David Glue (*Bulletin of The Heather Society* **4** (11, Autumn 1990)) recommended a variant of this – mix dried holly leaves with peat mulch and spread this around vulnerable heathers.

4. As a last resort, try luring a truly pestilential moggie away from the heather bed to another part of the garden with dried valerian root (*Valeriana officinalis*), a substance which apparently cats find utterly irresistible – in bygone days it was used in trapping cats and so one of its names is cat-trail. Geoffery Grigson (1955. *The Englishman's flora.*) can be quoted: 'If you wish to try the effect of Valerian root on your cat, let the root dry first until the smell develops. Not a very pleasant smell: like new leather and yet foetid ...'. Good luck!

ECN

How high the prune?

Arthur Johnson (1956: 58–59) thought pruning heathers is a waste of time. Among British writers at least, he appears to be alone in such a casual approach, and there is a surprising degree of unanimity among the others. To improve the overall appearance and keep the plants 'young', we annually prune each branch immediately below flowers which have just died or, in the case of summer flowering plants, in March after the immediate threat of frost, for extra colour and protection against the winter's assault.

As a beginner, I have followed that advice to the letter, my scissors and secateurs snipping away in the spring sunshine, my poor spine screaming A. T. Johnson's reminder that heathers are supposed to be labour-saving plants! (Pruning a large *Calluna vulgaris* 'Kinlochruel' will one day break this camel's back. Surely nurserymen cannot prune thousands each year in such a painstaking fashion?) So how come, after all that effort, I seem to have made a hash of it? Proof of my inadequacy is all too clearly visible in the three beds of 'Darkness', 'Dark Beauty' and 'Dark Star'. In each bed there is one plant left over from last year, pruned in March; all the others were bought this year from my excellent local nursery, already pruned. The odd one out in each bed is quite obvious – my old ones are smaller, darker towards the base, misshapen, and slower developing.

Most books tell you how to prune, but few show you. An article written partly by a nurseryman in the Society's 1973 *Yearbook* (Hamer & Vickers, 1973) is a useful start for very young plants; Everett (2000: 16) seems to show pruning more severe than 'immediately below the old flowers', as well as the pruning of branches that have not flowered at all; and Mikolajski (1997: 50) shows more mature plants.

Taken to its illogical conclusion, why not prune to an inch or two above the ground each year? Did anyone repeat the practice observed by Herman Blum in the Netherlands, and translated in two articles in the Society's *Yearbooks* for 1990 and 1991 (Blum 1990, 1991), with or without the application of beech leaf mould? Should I try with one or two specimens to see what happens?

Pruning is always a vexing subject. If you prune too hard, you could lose the character of the cultivar so they all look like hedgehogs, or even worse, lose the plant altogether. On the other hand, pruning too lightly, or not at all, will result in very untidy plants which have to be replaced much more frequently.

It is worth knowing which hardy heathers can be pruned very hard (within a few inches of the ground) without risk. These are *Erica arborea*, *E.* ×*griffithsii*, *E. manipuliflora* and *E. vagans*. It is dangerous (to the plant) if you cut below the

last year's growth with all other hardy heathers.

When plants are very young, snipping just below the dead flowers at Easter is best. That way you do not lose the character of the cultivar but once they are older and you have many plants to prune, this is clearly impracticable and more drastic means need to be brought into play. Hedge trimmers, strimmers, leaf blowers vacuuming up the cut material are all employed to ensure heathers do not lose their labour-saving tag!

Even this is can be too much effort, so why not use the lawnmower? After all, growers often mow young plants several times to get bushy plants whilst they are still in their pots. Why not grow a heather lawn? Alice Knight has done just that creating a kaleidoscope of colour by mowing seedlings in early

May in the meadow where her nursery used to be!

DIS

THE UGLY DUCKLING

Please don't tell me that it's my own fault – that doesn't help. After 60 years, my first six-pack! Like so many before me, I bought a little assortment casually from a garden centre. *Calluna* sounded exotic, though I was quickly brought down to earth by the *vulgaris*, and planted them in a short row. They took, rather to my surprise, and were therefore followed by six more. Soon I had a couple of dozen, sitting proudly among the perennials (weeds, that is), their pedigree displayed on plastic labels.

Cats and the first big wind disturbed this experiment. Some labels disappeared from the bed; others lay prostrate where they were once vertical. The only solution was to draw a chart, each plant numbered and (where known) named, No. 1 being *Calluna vulgaris* 'Salmon Leap'. Except – it wasn't! As it grew, the beginner's profiles in Letts (1966: 72) convinced me that this was an *Erica carnea*, a guess confirmed when white flowers appeared during the first three months of the following year. (Alas, the ugly duckling that was the real 'Salmon Leap' grew into an ugly duck.)

One winter later, my *E. carnea* No. 1 was, and three years later still is, the most beautiful plant in the whole garden and I became determined to have a

whole bed of them. There was only one small snag – I don't know what it is. I guess anyone moving home and finding heathers in the garden might have a similar problem. I have taken cuttings, of course, but I'd still like to know what it is. My notes for comparison with cultivars in the Society's *Handy guide* read as follows:

Size: 30cm x 60cm (south-facing, sheltered position, in natural soil pH 6.0)

Foliage: bright mid-green

Flowering period: December to April (pruned at the end of April when still floriferous)

Flower colour: very difficult to pin down to a word or an H number. In December, the flowers open white, but by January they turn lilac – or is it pink? Lavender, perhaps? Pale mauve maybe? It seems to dodge happily between examples in the Society's colour chart, and taking cuttings to show friends have produced all these reactions. Unfortunately, my local heather nursery does not recognise the cultivar.

The *Handy guide* suggests a number of possibilities, but none is an exact match, and their names do not sound familiar to me. Furthermore, it seems very unlikely that a local garden centre would have had some of them in stock.

What steps are available to find out what it is? I am not a botanist, but am prepared to do the homework required if only I knew where to look for a description of individual cultivars more detailed than the general species outline provided by Underhill (1990: 210).

A STRANDED CALLUNA VULGARIS "PARTOUT"

The face of the Peak Park warden was a sight nobody should have to see. He had just been told that an acre of wild heather – that might aptly be nicknamed *Calluna vulgaris* "Partout" in this part of the world – had been strimmed to the ground so that the area could be hired out for horses. It was the first time I had heard of the common loss of the common ling in the national park, even on the grouse moors. Some 15 years on, no part of that acre has recovered, and that made my little discovery all the more significant.

Next door, the greater part of our garden had been enclosed from open moorland in 1907, and has gradually been civilised by the ramification of rhododendron bushes. Among the thick, moorland grass yet to be swallowed up by what is essentially a six-foot high ground cover shrub that thinks it is king merely because it flowers for a couple of weeks in the year, there it was – a small sprig of the now ironically named *Calluna vulgaris* "Partout", the

Identification of unnamed *cultivars* is never easy unless the plant is something absolutely unmistakable – when, as in *Erica carnea* and *Calluna vulgaris*, numerous very similar cultivars are available commercially the task of identifying an "unknown" is virtually impossible.

The only way to achieve even a small degree of certainty is to compare the unknown heather with accurately named, living plants in a reference collection, such as the National Collection of Heathers at the RHS Gardens, Wisley. For cultivars, relying on descriptions in books, no matter how comprehensive those descriptions may be, is fraught with countless uncertainties. While the Society's Handy guide and International register of heather names contain comparatively vast numbers of descriptions, they should not be relied upon to identify cultivars – indeed cultivar identification is not the purpose of either work.

The Royal Horticultural Society provides an identification service for its members and the general public – for details you must consult the RHS website

www.rhs.org.uk/science/mn_advisory_service.asp.

The Heather Society will try to assist members identify unnamed plants – but the Society does not claim to be able to provide accurate names for such waifs. To avail of this service, members **should first make contact** with the Registrar (Dr Charles Nelson) or the Administrator **by telephone**, **fax or email** to ascertain if specimens can be received. There is no point in posting specimens without first asking because they could remain in unopened envelopes for weeks if, for example, the relevant person is overseas.

You will be asked to send a *freshly gathered flowering specimen* (*not* one that is only in bud), carefully enclosed in a small plastic bag, by first-class mail. Try not to crush the specimen – use a small padded envelope if you can. Do *not* wrap the specimen in sopping wet newspaper or kitchen towel – this is not helpful and makes an awful mess of most specimens. *At most*, put two **drops** (no more!) of fresh water into the plastic bag before closing it, but if the specimen is already damp (for example with dew), do not add any. A piece of heather so treated will remain fresh for many days.

It also helps to provide as much background information as you can, and to try to describe the plant's habit and size.

ECN

sole survivor of a century's neglect, gasping for air and light. Rescue was irresistible, and soon it thrived in a small area stripped of competing grass and lit by cutting back the rhododendron.

The little heather grew into a long legged bush, the lowest leaves now eighteen inches from the roots, and remains so even now when my interest in growing heathers is still very new. Old, woody plants have not had a good press! Should I, therefore,

- a) dig it out and remove the problem? Why save one plant, after all?
- b) leave it to die naturally by strangulation?
- c) encourage it to spread if so, how? Should I
 - 1) hope it seeds naturally?
 - 2) layer it, covering the lowest branches with peat and sand, or with the adjoining peaty soil?
 - 3) take cuttings would the plant be too weak?
 - 4) cut the main bush to one-third size, as advocated by Fred Chapple (1964: 57)?

The plant is clearly a survivor without outside help – perhaps any physical interference might cause it to die from affection.

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[Editor's note. We have not attempted to answer the fouth question, hoping members who have views on this dilemma might wish to respond either directly to Dr Rogers or through The Heather Society's *Bulletin* or *Yearbook*.]

Trying to create a garden in Connemara

SUSIE KAY Lettergesh East, Renvyle, Co. Galway, Eire.

Are you fit? Do you have a bar? Do you like wind and rain? Are you mad? I was not very fit, didn't know what a bar was, and I am probably mad!

In 1985 we were fortunate to purchase a site for a holiday home in a scenic part of the world – Connemara, on the western seaboard of Ireland. The site, a few hundred yards from the Atlantic Ocean at the foot of a steep, glaciated mountain, faces north and has a slope of about 1:10 and, as we were to find out later, contains all sorts of rock and stone which Mother Nature had seen fit to deposit there over the years. Another thing we didn't appreciate in those early days was the effect the mountain had on winter sunshine. For ten weeks in mid-winter, the sun never rises above the bulk of the mountain. Towards the end of January, we eagerly await its return, watching the midday shadow shorten from the North towards us until, if the weather is fine, the sun finally blesses us with its return.

But gardening didn't really cross my mind as we surveyed the brambles, rushes and bracken, some almost head-height. The builders soon had them trampled down and imported many lorry-loads of fill to make a road and all the other accoutrements needed to raise a watertight structure. As soon as the builders had finished, the briars and their companions made a rapid reappearance.

In the long gaps away from Connemara, necessary to earn money, I would ponder what should be done about the overgrowth of Nature that was now ours. We visited the only local garden-centre, some 20 miles away, and sought advice from the owner, Charles Dyck, who, despite his obvious potential commercial interest, was full of gloom and doom about making gardens in Connemara. His advice was to plant 12-foot high hedges of *Olearia*, and even that would not be enough to prevent the destruction of plants by gales and rain. There would, however, be little frost so plants from the southern hemisphere would do well, as long as the tall hedges protected them.

But our house is literally at the bottom of the mountain and I felt strongly that we needed some sort of gradual transition from man-made garden to wild mountain terrain. So, no high hedges, but maybe low-growing plants and some of what grow on the mountain – heather and grasses. I had always



Fig. 1. Susie and Alan Kay's garden with Killary Harbour and Mweelrea in the background.

liked heathers, so they became the natural choice, along with conifers and possibly some sturdy shrubs.

We went to Southport Flower Show and met Stan Crabtree, a heather nurseryman, who fanned the flame with his beautiful plants. He invited us to his nursery to view the large number of cultivars and told us about The Heather Society. Before this we had been learning the hard way what our life was going to hold in trying to cultivate our acre of wilderness.

Not only was there rampant vegetation, but there were stones of every size, shape and weight. And, this is why you need the (crow-)bar! Bars come in various sizes – our's is about 6 feet long and weighs "a ton". When preparing a small piece of ground for planting there would always be a stone that was too big to move with the shovel or fork. Applied physics (and the under-gardener) would come into play; with various boards and pieces of timber acting as fulcrums, and after much heaving and grunting, the stone (boulder!) would appear on level ground. Cheers, and a beer, a bit more digging, and then the whole process would need to be repeated for the next stone.

The first small area to be developed was by the back-door and we quickly discovered some of the stones there were actually bedrock – change of plan, instant rockery! Only about 10 square yards was to be prepared. Husband and Number 2 Son set to, and for every square yard, there was one barrow-load of "roots various" and one barrow-load of stones. I put in the first plants – two conifers, two heathers and a shrubby cinquefoil (*Potentilla fruticosa*). They did grow, but not until we learned the lesson of enclosing everything in a palisade of chicken-wire. Sheep were our main enemy in those days. In winter particularly, ordinary fences proved inadequate to deter hungry sheep. The heather turned out to be *Erica erigena* 'Superba', and it grew too big and has had to be moved. The conifers were also very successful and have progeny all around the garden.

At the front of the house, there is a north-facing bank and this was our next project, the general idea being to develop a *cordon sanitaire* of garden immediately around the house. No more excessive digging – we'd discovered black plastic sheeting. Down it went to smother the unwanted vegetation: slits were made in it, and in went the plants: spare rocks were placed strategically to mimic the mountain. "Instant garden" – several *Hebe* and a few heathers only, but we were beginning to get hooked.

In those days it was a holiday home, so we only visited three or four times a year. We would arrive about 2 a.m. and by torchlight I would eagerly examine plants, after I had parted weeds to find them. Why do weeds always

grow more vigorously than one's chosen plants?

In an attempt to provide some protection from the wind, an *Escallonia* hedge was planted. This was done, according to the advice in books, using a diagonal chicane-planting pattern to make sure it would be thick enough. The poor plants had only been in a week when there was a phone call from the neighbour, who kept an eye on the place. "There has been a small drop of rain, and afterwards a flash-flood. The stream running along the eastern boundary is now within 6 feet of the house, threatening to undermine the footings. The electricity pole is down and you had better come over fast." The flash-flood had not only done the damage reported by the neighbour, but had also washed away quite an area of our land and about 50 yards of the access road. Altogether an expensive little shower.

Our lovely little *Escallonia* plants had to come out to allow the digger

Our lovely little *Escallonia* plants had to come out to allow the digger and tractors access around the house to repair the damage. The lawn – patch of grass – at the back of the house was churned up by digger tracks and became a sea of mud, and the comment "Ah! sure it'll grow again" was hard to believe. The digger in its numerous forays up the mountain to obtain

stones to rebuild the stream bank destroyed the stone wall to the south. If you are faint of heart, look the other way when a digger is bringing boulders bigger than a double-bed down a 1:3 mountain-side.

The *Escallonia* hedge was replanted, grew, was half-destroyed by a mighty salty wind, came back and now is too wide to reach across the top to trim easily. Cuttings have been distributed to all and sundry in the neighbourhood. Salt-laden winds are a regular occurrence, but plant the right things and, it seems, they will grow.

Progressively, grassy areas were established at the front by just repeatedly attacking the vegetation using a large-wheeled mower and, on one occasion, our young neighbour's tractor gave it a trim. After many failures and disappointments, but a few successes, we were beginning to have a little understanding of this gardening lark.

A few potatoes would be a good idea, so neighbours were consulted about construction of ridges. Virtually all veggie growing in Connemara is done on ridges – the so-called lazy-bed system. There is nothing *lazy* about it – turning over the scraw from both sides of a rectangular stretch, putting in the seaweed and then somehow making a hole for your little chitted seedpotato. With the help of English friends over on holiday, four little ridges were prepared. I knew about the dreaded potato blight, the reason why most of Connemara was depopulated in the 1840s, but never gave it a thought. God must have been on our side! No sign of any rot. He didn't make them grow very big, but what harm, they tasted good.

A few small trees were planted, refugees from a canal bank in England. They were just little seedlings but what fun it was watching them grow. Then came the disappointment, on a visit, discovering that their tiny little branches appeared to have been cut off. This was how we became aware of our main enemy – the hare! Various strategies were employed to fox him, or maybe it was (and still is) a "her". We were learning to cope with the forces of Nature such as wind and rain; everything must be staked for the wind, and drains dug for the waterlogged clay (soil in Connemara), but the hare is a more formidable foe! We can't keep him out. Bright, moving objects don't intimidate him. He laughs when the dogs try to catch him, and only last week we watched him standing on his hind legs harvesting our best apples.

The bank in front of the house was finished by the summer of '94 and my interest in heathers was taking off. I realised that the ground needed to be better prepared, but what to do with all the stones? The answer, for us, is an ultimate in recycling. Gabions (wire cages) were constructed from green, chain-link fencing and placed at strategic intervals in the stream bank, and

then filled with the smaller stones that I had dug out, whilst the larger ones were kept for dry-stone wall construction in the future. To date more than 80 gabions have been filled, covered in a miscellany of garden waste, grown over, and now present an attractive slope rather than the scar left by the flash-flood. We still get flash-floods but, "touch wood", we now seem to be able to cope with them without any disastrous consequences.

By now it was obvious that the winter-flowering heathers were actually

By now it was obvious that the winter-flowering heathers were actually growing well, but there was no space ready for summer cultivars. Various plans formed in my mind, the favourite being to start a new bed by taking a bit of the so-called lawn. This idea coincided with my retirement/redundancy which meant I was able to spend much more time in Connemara. So suddenly I had a new job – Head Gardener!

It was also about this time when I first met some members of The Heather Society. They seemed a jolly lot and their knowledge of heathers was enormous, whilst I knew nothing. To Dublin for the Conference – and I was introduced to a world of heathers that I had never heard about – Cape heaths! Would these plants grow in Connemara? Ted Oliver and Deon Koetze, who were at the Dublin Conference, came to visit and said maybe they would and that I should consider growing some *Restio* along with the Cape heaths, since this was what happened in the wild, in the fynbos in South Africa.

The summer of '95 was the best for years, but brought problems of a different kind. The ground became very dry, and so did the stream, which is our water-supply. Newly planted trees had to have bath- or washing-up water and I scanned the western horizon for clouds whilst considering how I could take the next stage of garden development.

A digger doing some drainage work in a nearby field brought up a few giant stones which we appropriated, and the driver volunteered to have a look for stones in the area I wanted to develop. Very kindly, as he thought, he turned over the area that was to be the new bed. It still needed further digging, so each day after taking the dogs for a walk to the beach, and a swim, I set to with my trusty fork and really "dug for victory", clad in bikini top and shorts. Slowly the soil appeared free of stone and, I thought, of weeds and grass.

Following the various bits of advice I had been given, the area was then planted up. This bed is known as the GHB – Giant Heather Bed – because digging it gave me GBH, grievous bodily harm. Then the weeds came. Lots and lots of sheep's sorrel (*Rumex acetosella*) with roots that are a mile long. When the digger driver had turned the clay over he had cut through the roots and now I had a million plants. That was the last time I allowed a

digger to turn over the scraw turf. However, the little heathers were examined every day and some did actually flower.

At the same time, building on the earlier success with the spuds, the second

At the same time, building on the earlier success with the spuds, the second phase of the vegetable garden was developed. The selected site was by the stone wall forming the western boundary, in the hope that the wall would provide some shelter from the prevailing westerlies. The looks of horror on the faces of the local people when I explained I was not building ridges and, yes, I was taking the stones out, were pitiful. Up at the pub there was much discussion about "this mad English woman, who thought she could grow vegetables without ridges, took the stones out which gave warmth to the soil, and, where did she go on the mountain to get the heathers that flowered in the winter?" With my new-found knowledge gleaned from Heather Society pamphlets and Terry Underhill's book, I would patiently explain that none of my heathers came from the mountain, that there were 23 different types of heather in Europe but if you went to South Africa you could find 750.

I kept digging. The GHB got larger, the lawn smaller. Targets would be set for each day as visions of heather beds just like the pictures in the books sprang to mind. But why did my plants of *Calluna* and *Erica cinerea* look so good in the spring and by summer look so woebegone with brown leaves and appeared to be dying? After consultation with the gurus of THS, I found they had various fungal diseases, probably caused by our mild, moist climate. Sometimes they recovered and sometimes they didn't. All winter-flowering heathers and *Erica vagans* continued to grow and give satisfaction, but I still wanted the summer-flowering ones and those Cape heaths that seemed so exotic.

I purchased several *Erica canaliculata*, *E. pageana* and *E. verticillata*. With due reverence, the plants were put into the ground, prayers were said and a few months later they flowered. Oh what joy! Then came a frost and I had forgotten to protect them, so rather late in the day they got some sheets of bubble-wrap and survived. A salt wind will sometimes brown the shoottips of *E. canaliculata*, and *E. pageana* lurks in its lee to this day, but in 2000–2001, the worst winter for 20 years, many of the other plants succumbed.

Kind friends in THS gave me replacement stock and these have been kept at the side of the house until this summer when the original bit of garden by the back door was dug up and enlarged as home for 24 plants of nine different Cape heaths with three home-grown baby conifers and some *Restio*. The thinking behind this is: it is sheltered from the salt wind and reasonably sheltered from other winds, but being by the back door I can rush out on cold, starry nights and throw the fleece over. I hope not to have to do this too

often (last winter our lowest temperature was –0.5°C and that only occurred on one night).

All my heathers and the Cape heaths are protected with a thick mulch of shredding. We grow our own mulch – *Fuchsia* hedges, which grow wild in the west of Ireland, are cut down to the ground and the branches put through the shredder. The thicker stems, too fat to go through the shredder, are cut up for firewood. *Fuchsia* grows so well that within a year there is almost another crop. Out on the road we provide a local clean-up service, carefully looking for discarded piles of branches to cart away and feed through our voracious machine. It amazes me how many branches need to be shredded to cover only a modest area. I spend days shredding huge stacks and I am now getting selective in my choice of material. *Fuchsia* is the best, but sycamore (*Acer pseudoplatanus*), cherry and conifers will usually go through easily.

Along with being diggers, we are real "Womblers": sacks of pine needles from the forest; branches, after the foresters have done their harvesting; and there is seaweed to be collected in November and February. This is piled onto the vegetable ridges and left to rot in. It is quite amazing how a trailer-load of seaweed just disappears over the winter. We have also carried and carted many tons of red stone. There is a seam of red, sedimentary mudstone nearby, which makes wonderful patios and low walls. At first we just used to search for loose pieces and carry them off the bog using wheelbarrows and ropes. But with the advent of EU money for road improvements the rock breaker has been in and by keeping our ears and eyes open we are able to take the trailer to wherever the road widening is being done and select pieces of this beautiful red stone. Because of this more plentiful source, red stone paths and patios now extend nearly all round the house. After I had seen paths made of shattered slate during the International Heather Conference in Germany, I copied the idea using the broken shale of the red stone. The colour can vary from pale pink to deep mauve; in fact it matches the colour spectrum of heathers and being a local stone helps with my objective of having a naturally sympathetic garden.

objective of having a naturally sympathetic garden.

We had come to realise the hard way that we needed to address the drainage problem. Following any significant rainfall the garden becomes rather soggy, mainly due to run-off from the mountain. The digger was again summoned and went through the wall on to the mountain-side to reopen an old drain which runs along our boundary wall. In doing so, lots of huge boulders were excavated. No question, they had to be put to use. It was like having our very own "Ground Force" team at work. Lots of fun with the



Fig. 2. Johnny's rockery with Erica spiculifolia x bergiana in left foreground.

digger traversing carrying boulders and forming a raised bed – instant rockery, without breaking one's back. With more time for thought I might have had a different shape and aspect, but if you see a passing digger, you catch it when you can, even if, as was the case in April 2000 when all this activity was going on, it is snowing. We do occasionally have snow even though it never stays for long. Johnny, the driver, in his enthusiasm broke the telephone wire. My daughter's boyfriend, who was staying at the time, managed to get up the ladder in the blizzard and re-connect the necessary wires. The wire did, however, seem to hang rather lower than before and when the telephone engineer came on another matter, he looked at the wire, then at me and said, "I'd better get a ladder". We now have a nice new wire.

Some weed treatment and then I was ready to plant up my cuttings from the Penrith Propagation Exercise. I have to confess that not all of them survived, but the ones that did are living happily in Johnny's rockery. Learning how to propagate was a bonus. There are little pots scattered all over the place and there is a certain pride in saying "raised the plant myself."

The GHB continued to expand as more and more of the grass was dug up – well, it makes less mowing – and more heathers were planted, but I had my mind set on further expansion. Adjacent to the main garden, we own a small field and this was my target. The vegetables were moved to a more sheltered place on the west side of the field and the freed-up space was quickly planted with more heathers and grasses. This completed the GHB, which is now home to about 1000 heathers.

Even with the space taken by the relocated vegetable plot, there was still nearly half an acre of field to go at. One person in the partnership wished to have some sort of a golf practice area whilst the other saw more and more heather beds crammed with every known cultivar and banks of exotic shrubs from faraway places. For the moment a compromise has been reached.

Having identified a large rock in the part of the field where I thought I might extend the heather garden, I hailed yet another passing digger and the driver obligingly hauled it out. On inspection it had a close resemblance to a frog, especially if two eyes were painted on it and I decided it would be used as a feature in the next phase of garden development.

In 2000, I was lucky enough to have a visit by our esteemed President and his wife and was able to discuss the various fungal problems, which blighted my *Calluna* and *Erica cinerea*. He said to me: "Susie, look at where the wild *Calluna* and *Cinerea* is growing. Nearly always on old walls or craggy raised areas, which are more free-draining."

I mulled over his comments, studied my Froggy rock and came up with an idea for slightly raised beds in the shape of a starfish with said rock sitting in the middle. Once again the digger came and did the really hard work shaping the long, sloping "arms" with all the rubbish clay and sods and carefully placing the Froggy rock at the apex. My job was then to dig over the "arms" and take out all the roots and stones, more filling for gabions. Sand and peat were forked in, and just at the right time the local tree surgeon turned up with two truckloads of shredded material. Some 400 heathers were put in and before long we were enjoying the sight of this strange bed but, as usual, it was also being enjoyed by other local inhabitants. The badger dug through all the mulch for the worms and the hare was enjoying breakfast, lunch and dinner. More fencing and netting had to be erected and the area is now completely cordoned off, even the dogs are not allowed in. A follow-up visit by the digger, to put in more drains and to level an area for a possible polytunnel (better propagation facilities?), turned up a very large, flat stone. This was placed in the "Froggy garden", and levered into position. Now I have a throne, à la "The Celtic Garden" at Chelsea 2002, on which to sit for

a few moments. As I write this article, some five months on, all the plants appear to be thriving, with about half in flower. There is very little disease so I look forward to seeing the whole area covered by flowers. Well, there is nothing wrong with dreams!

Now I have learned a little about gardening and the local conditions, some areas have to be reassessed. A garden designer would have nightmares about how we have approached our piece of land, but it has led to a lot of fun, some disappointment and many frustrations, but a whole new life. This is mainly due to The Heather Society, which opened up a different world. I've met growers and nurserymen; botanists and enthusiasts have pointed me in the right direction. We went to South Africa and saw a wonderful array of *Erica*. Ted and Inge Oliver looked after us so well and showed us their country which I have to say is more stunning than Connemara. I visited Holland and Germany and met Kurt Kramer and saw how plants are bred and then grown commercially. I nearly visited the North American Heather Society Conference last September, and all the time these people give me ideas for this modest plot.

I do ponder a lot on why I try to create a garden when I am surrounded by mountains and bog, where heather grows in such profusion. Just over the back wall is a rocky outcrop with *Erica cinerea*, *E. tetralix*, *Calluna vulgaris* and *Daboecia cantabrica* all in an area no larger than my diningroom table. *Erica erigena* grows on a nearby headland, and elsewhere in Connemara there are colonies of *Erica ciliaris*, *E. mackaiana* and *E. ×stuartii*. I recently visited a friend who has no interest in gardening and thought to myself, "I'm going wrong somewhere". In the garden there were swathes of montbretia, banks of fuchsia, frothy plumes of meadowsweet and spires of purple loosestrife, all growing without much human effort. I am not really trying to improve on this, but to produce a garden which is complementary to Nature and fits in to the local environment. Despite all the trials and tribulations it has been worth having a go.

So if you are passing by, please drop in and give me some more suggestions. You might get a cup of tea for your trouble.

International heather gardens: Mount Tomah, New South Wales, Australia

BARRY SELLERS 8 Croft Road, NORBURY, London SW16 3NF.



Eig. 1 A view from Mount Tomah Botanic Garden looking towards the Blue Mountains.

It was my pleasure to pay another visit to Australia in March 2001. On a trip to the Blue Mountains, west of Sydney, I came across a leaflet advertising a botanic garden. Seeing reference to a heather garden it became a 'must' visit.

Mount Tomah Botanic Garden (Figure 1) is situated 105 kilometres from Sydney. It lies at an altitude of 1000 metres above sea level. It represents the cool-climate garden of the Royal Botanic Gardens, Sydney, and many plants not suited to Sydney's climate can be grown successfully. Many plants growing at Mount Tomah have been collected from the wild in Australia and overseas. They form part of the Royal Botanic Gardens' scientific collections, which are used by their botanists to study the classification of plants and plant ecology. This research supplies important information for developing conservation policies for New South Wales.



Fig. 2 Erica conspicua

Fig. 3. Erica baueri

Mount Tomah Botanic Garden takes its name from the mountain on which it is located. The original owners of the land were the Daruk Aboriginal people. Tomah is reputedly an Aboriginal word meaning tree fern. In 1804 the naturalist and explorer George Caley was the first European to visit Fern Tree Hill, now Mount Tomah. In 1823 Archibald Bell, with Aboriginal guides, found the route across the northern Blue Mountains now known as Bells Line of Road. Later that year the botanist Allan Cunningham (Superintendent of Sydney Botanic Gardens 1837–1838) followed the same route.

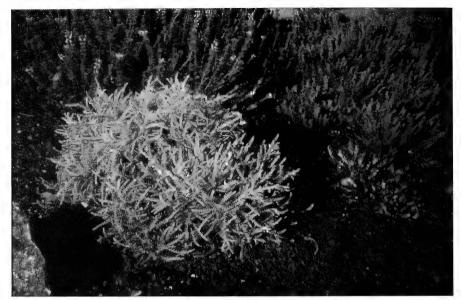
In 1830 the first land grant was made to Susannah Bowen. The property was used for dairying and resting paddocks for cattle. In 1934 the property, now occupied by the Garden, was bought by the French-born botanist Alfred Louis Brunet and his Australian wife, Effie. They produced cut-flowers to supply Sydney florists, and specialised in bulbs and other cool-climate plants. In 1972 the Brunets generously donated their land for incorporation as part of the Royal Botanic Gardens, Sydney. Mount Tomah Botanic Garden was a Bicentennial project and was opened to the public on 1 November 1987.

Mount Tomah is capped by a 100-metre thick layer of basalt, the result of a lava flow about 15 million yeas ago. As the lava cooled it shrank and cracked, forming the distinctive hexagonal columns which feature in the stone walls in the Garden. The joint fractures in the stone serve as a natural reservoir for rainwater, which provides a reliable water supply for the Garden. Basalt weathers to form a nutrient-rich, acidic clay-loam which is more fertile than most Australian soils and ideal for growing a considerable range of plants.

The Garden is around 28 hectares in area. It occupies a north facing slope so gets full sun (the reverse of gardens in the Northern Hemisphere) and there are extensive views northwards across the Blue Mountains. More than 5000 species from the cooler parts of the world are grown. The arrangement of the plants within the garden is according to their geographical origin. The Heath and Heather Garden is located on the northern perimeter of the Garden. Uniquely the heather collection contains both South African and European Erica grown outside without any protection in several extensive drift-beds. The one at the northern extremity contains the South African Erica. At the time of my visit E. conspicua with its long red flowers was a magnificent sight (Figure 2). Erica baueri (Figure 3), E. verticillata and E. glandulosa were also in flower. Erica patersonii, E. bodkinii, E. caffra, E. canaliculata, E. speciosa and E. cerinthoides were also represented. Adjoining this to the south were the European heathers. It was amazing to see so many species flowering in March! There were E. ×williamsii cultivars such as 'Gwavas', E. mackaiana 'Shining Light', E. cinerea cultivars including 'Pink Ice', and cultivars of *E. vagans* and *E. ciliaris*. *Calluna vulgaris* and *Daboecia* were also in bloom. The "winter" heaths were also represented; *E. carnea* 'Ann Sparkes' and 'Springwood White', E. erigena and E. xdarleyensis cultivars were in bud, no doubt flowering around June and July.

Also in the heather garden are indigenous Australian "ericaceous" plants from the family Epacridaceae.

For those of you visiting this part of Australia a visit to this garden is a very rewarding experience and justifies a whole day.



ERICA MANIPULIFLORA 'TOOTHILL MUSTARD'

After the 1990 Conference I was given rooted cuttings of three clones of Erica manipuliflora collected during the trip by David McClintock and Bert Jones to Dalmatia, in the former Yugoslavia, during October 1988. I grew them on and one (AWJ5) developed a sport. The first signs of this were in 1994 and cuttings were taken in 1996. A few of these rooted and were grown on in pots before one was planted in 2000 in heavy, alkaline soil in an exposed site offering fairly good drainage. After a successful year it has been named 'Toothill Mustard' after the impure yellow of the new foliage, partly due to the red stems, and the garden's location. The foliage becomes bright by early summer fading somewhat through the autumn. 'Toothill Mustard' appears to have a bushy habit with arching, cross-cutting stems; this contrasts with the parent plant which has erect shoots.

The trip on which these heathers were found was described by Bert Jones in Yearbook of the Heather Society 3 (7): 36 (1989). He reported that yellow-foliaged plants were observed about 10km southeast of Slano, so this is not unknown in the species. Underhill (Heaths and heathers, 270 (1990) referred to 'Makarska Gold' (in

species. Underhill (*Heaths and heathers*, 270 (1990) referred to 'Makarska Gold' (in error as 'Maranska Gold') found by Jack Platt at Makarska in former Yugoslavia, and subsequently lost. Another clone (89/27) gathered by David McClintock in Turkey in 1989 had gold shoot-tips (*Yearbook of the Heather Society* 3 (9): 29 (1991)).

Of the two other Dalmatian clones, AWJ3 is now named 'Cascades', while AWJ2

is still unnamed. The latter has developed into a large, rounded bush with an open habit, well clothed with red-stalked flowers that appear almost white at first but deepen to pale pink. All these clones start flowering in September.

R. CANOVAN

Heathers in a Herefordshire garden

Daphne Everett The Bannut, BRINGSTY, Herefordshire, WR6 5TA.

When in September 1984, Maurice and I moved from Crossway Green in Worcestershire to Bringsty in Herefordshire, it was in order to expand our heather nursery. At Crossway Green we only had room to grow around 100,000 heathers a year, whereas at Bringsty there would be space to spare for 250,000 or more. We couldn't have chosen a worse month to move, as autumn orders were only just coming in and the nursery was completely full of plants ready for sale. Our garden-centre customers always seemed to hibernate until September! This meant that 100,000 heathers had to be boxed up and moved to their new home.

The house move was accomplished in one day, but boxing and transporting the plants (as well as delivering orders) took six weeks! I think the new owners thought we were never going to leave them in peace.

Before we bought the house we tested the soil and found that it was acid,

Before we bought the house we tested the soil and found that it was acid, which was fine, as we wanted to plant a heather garden. However we did not realise at the time just how fortunate we were. It wasn't a very good start to a friendship to sell several hundred acid loving heathers to a couple who had just moved into a house about three miles to the east of us – only to discover the hard way that the soil there is very definitely alkaline. I am pleased to say that, in spite of this, we are still good friends! We later discovered that an acid strip (only a few miles wide at this point) runs from the Malvern Hills to our south, to the Wrekin in Shropshire to the north, and Bringsty is inside that acid strip.

When we moved in, the front garden contained a weeping willow tree, a walnut tree and a lawn with a beautiful Herefordshire cider mill as its focal point. We named the house 'The Bannut' (Bannut being the old Midlands name for the walnut tree) and we planned to plant this area with heathers as a display garden for the nursery. Apart from a small vegetable plot outside the kitchen door, the rest of the three acres was a grass field. We set aside one acre for our garden, leaving the other two acres for the nursery.

Our move to Bringsty coincided with the Stoke Garden Festival, where the Midlands Group had been asked to plant up a heather bed. Our nursery provided the plants for the display and we were told that we could have them back at the end of the Festival if we were prepared to collect them.

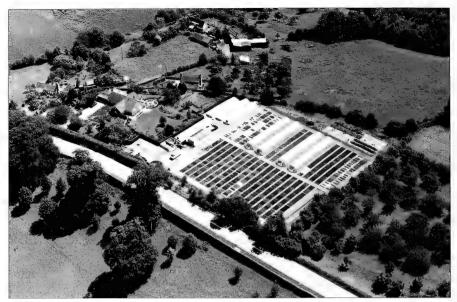


Fig. 1. Aerial view of The Bannut in July 1992.

[Photo: Commission - Air]

There had been torrential rain for several days and the site to be planted was on a steep bank. The 'soil' into which we planted a selection of *Calluna* and *Erica cinerea* cultivars had the colour and the consistency of runny porridge and I didn't hold out much hope of the heathers staying in their planting holes, never mind actually *growing*. In fact, the groundsmen on the site told us later that they had had to replant them a couple of times after porridge and plants had slid down to the bottom of the slope. However, whatever the 'soil' actually was, once the plants stopped sliding they thrived and they arrived back at Bringsty in October as large healthy heathers – just what we needed as the basis for our new display garden.

Our demonstration heather garden was planted to give colour throughout the year, with a mixture of winter, spring and summer-flowering heathers. Herefordshire soil is heavy and doesn't grow happy bell heathers (*E. cinerea*) without giving them a lot of TLC, but those from the Garden Festival were planted straight into the basic soil and, 18 years on, most of them are still putting on a very good show. I am not quite sure what this proves!

Our heather knot-garden, which was featured in the 1994 *Yearbook*, was planted in 1992. The interlocking hedges of *E. erigena* 'W. T. Rackliff' and 'Golden Lady' have grown well and been much admired by visitors to the



Fig. 2. Aerial view of The Bannut in August 2002

[Photo: Commission - Air]

garden. We have continued the theme with a low 'W. T. Rackliff' hedge around the edges of the adjacent terrace.

In the knot-garden's early days it was visited by Sir Roy Strong, who lives in Herefordshire and has written several books on formal gardens. His own garden is a masterpiece of formality, with garden rooms full of box hedges, and topiary in intricate designs. Sadly, in recent years these box hedges have been affected by a fungal disease (box blight) which causes the plants eventually to lose their leaves. The lovely knot-garden designed from Sir Roy's and his wife's interwoven initials has already had to go. However, our knot-garden must have stayed in his memory because he recently came to us for some advice about using heathers in place of box.

I must admit that in the last couple of years some segments of the knot-garden have not been looking their best. Several of the plants almost died, leaving the hedges looking patchy. My own theory is that the plants were affected by the combination of an extremely wet winter, combined with a couple of periods of severe frost. The plants are slowly growing back, but, if it takes too long I shall take them out and start again.

Plants of *E. scoparia* 'Minima', which were planted several years ago as an edging around the formal beds in our Yellow-&-white Garden, have now

been trimmed into attractive low, apple-green hedges. This plant (from the Mediterranean region) seems happy in our Herefordshire winters. Its only drawback is that the growth is rather soft and easily suffers damage when jumped on, fallen on, or sat upon by uncontrolled children (who also climb on garden features, break plants and pick up garden ornaments under the benign gaze of their doting parents).

Yet another heather hedge has been planted recently, as an edging to some of the paths in the newer areas of the garden (where the nursery once was), including both sides of our White Wisteria Walk. We have chosen *E.* ×*darleyensis* 'Arthur Johnson' this time and the plants are growing quite well – except for a few where Maurice got too close with the weedkiller and a few more where a coach driver parked a bit carelessly. Whereas the other hedges are trimmed several times a year and therefore don't get the chance to flower, this one will only be trimmed once, after flowering, and should make a colourful edging to the walks in winter and spring.

To digress slightly, we are going to have to change the name of the White Wisteria Walk (which we planted a couple of years ago), as the "white" wisterias have flowered for the first time this year and, unfortunately, are a mixture of blue and pink, but only one white. Rather than wait a couple more years, and be disappointed again maybe, we are going to take them all out this autumn and, to commemorate our Golden Wedding year (2002), we intend to plant a Golden Laburnum Walk instead.

When we 'retired' about five years ago and closed the heather nursery, we had to decide what to do with two acres of nursery ground completely covered in black woven plastic ground-cover. Trees are Maurice's passion and he favoured sowing the whole area with grass and planting it with interesting trees and shrubs. However, having grown and loved heathers for more than 30 years, I decided that I really wanted another heather garden. As usual, after 50 years of practice, we compromised and now have a wild area (our Far Garden) planted with some beautiful specimen shrubs and trees, and home to thousands of cowslips (*Primula veris*) in the spring, plus a colourful, quarter-acre heather garden – now in its fifth year. There is also a small nursery where, between us, my Mother and I propagated all the plants we sell to our visitors. Sadly, my Mother recently passed away, aged 97, but I'll bet that, as soon as the Spring arrives, she will be worrying St Peter to find her some potting to do!

Over the years we had stockpiled a mountain of very useful old nursery compost and once the nursery was cleared we hired a tractor and driver to spread this liberally all over the new heather garden. What we hadn't realised



Fig. 3. A view across the new heather garden, September 2001. (E. C. Nelson)

was that, while the mountain had been maturing, it had also become infested with miles and miles of "mare's-tail" roots (also called horsetail, Equisetum). It wasn't until the whole nursery area had been spread with compost (and mare's-tails) and the problem had been compounded by the roots being chopped into tiny pieces by the rotovator, that we realised what had happened. So, the next few weeks were spent walking backwards and forwards over the whole area every day picking out pieces of root as they began to grow. There are still a few horsetails that obviously we missed growing among the heathers.

The new heather garden was designed to flower throughout the summer and autumn. It was divided (with bark paths) into around 20 large beds with a wide

curving grass area running through the centre. Three silver birches were planted in the intersections of the paths to give the garden some height. On the north side of the area was one of our original nursery drives, which had been so solidly laid 18 years ago, that we decided it would be best to leave it in place and make a feature of it. The limestone in this drive had caused us problems for many years, as, every time the nursery was irrigated, or it rained, the lime washed out on to the nursery beds. I therefore decided to plant each side of the drive with lime-tolerant heathers – mostly winter and spring flowering – and these have flourished, putting on a wonderful show early in the year and giving added interest to this part of the garden. The main part of the heather garden was to be planted to flower in summer and autumn.

In my mind I had pictured large swathes of the brilliant pinks, reds, purples and lilacs of *E. cinerea* flowering in high summer, followed by the autumn display of *Calluna* – however, this was not to be. The first two winters were particularly wet and, although the whole area had been liberally mixed

with the old nursery compost, most of the E. cinerea cultivars sulked in our heavy soil and died. Since then, by adding liberal quantities of grit to the places where the E. cinerea were to be replanted, we have managed to put on a reasonable show. However, Calluna grows very happily without all that effort, so it seems sensible to concentrate on its cultivars and accept a mainly late-summer heather display. As it happens, it has worked out rather well, as the Calluna cultivars take over just as the herbaceous displays in other parts of the garden are coming to an end and they make a colourful show for visitors to enjoy until we close the garden at the end of September.

That old limestone nursery drive is still causing problems. Years of runoff has caused a build up of lime in the soil in a couple of places and plants in two of the summer heather beds have been looking rather chlorotic ever since they were planted. However, they are gradually improving – this year, the foliage on Calluna vulgaris 'Hammondii' and E. tetralix 'Alba Mollis' is at least looking a sickly green, instead of bright yellow.

In this heather garden we have gone away from the concept of heathers and conifers. Height in the beds is provided mainly by tree heaths, Hebe and Hibiscus, with just a few dwarf pines dotted around to keep Maurice happy. The Hibiscus, in particular, have been a great success, as their blues, pinks and lilacs complement the colours of heathers very well and their upright habit doesn't cast too much shade.

As you may have deduced from some of my comments (if you didn't know already), we decided four years ago to open our garden to the public several afternoons a week. It seemed a good way to be able to afford to pay for any help we might need in the garden once there was no more income coming from the nursery. There are almost half a mile of hedges in and around the garden and we have always had someone who comes and cuts those to perfection. More recently a strong and willing young man has been working a couple of half-days a week to do the heavy jobs that our backs won't stand any more – such as barrowing and spreading gravel. He also helps with the weeding - especially in the heather garden, where he can feel sure that if it is not a heather it must be a weed.

Maurice and I are enjoying our 'retirement'. We meet many interesting people during the spring and summer when the garden is open. It was a great pleasure to welcome members of The Heather Society during the 2001 Conference and we were even featured in a television programme – but you had to live in Belgium to see it!

We have plenty of projects to keep us busy after the garden closes at the end of the season and I bear in mind what my old Dad used to say: "As long as you have got something useful to do, that's alright!"

Erica savileae, the Countess of Scarbrough's heath: a mystery resolved?

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The Countess of Scarbrough's heath, *Erica savileae* H. C. Andrews, is native at altitudes between 1,000 and 1,500m in the mountains between the Hottentots Holland and Villiersdorp. It blooms in summer (October–January in the southern hemisphere), producing rich reddish-pink flowers that are somewhat egg-shaped with four spreading lobes at the tip (Figure 1).

HISTORY

The earliest record of this species, as "Erica savillea", is found in an unpublished manuscript list, dated 24 October 1808, provided by Messrs Lee & Kennedy, nurserymen of Hammersmith, to William Townsend Aiton, Curator of the Royal Gardens, Kew; the list (RBG Kew Inwards books) recorded *Erica* spp that hitherto had been introduced into cultivation by that firm. (Loddiges (see below) and some other sources note a rival claim that the species was introduced by the wealthy, Cape *Erica*-enthusiast George Hibbert.)

the wealthy, Cape *Erica*-enthusiast George Hibbert.)

In the following year, as far as can be determined (see Cleevely & Oliver, 2002), Henry Charles Andrews published an illustration (plate 205) of this plant in one of the fascicles that eventually formed the third volume of his sumptuous book *Coloured engravings of heaths* – Andrews used the name *Erica "savileia"* (for a discussion of the spelling of the epithet, see below). The exact date of Andrews' publication is not known, but it is interesting to note that *Erica "savillea"* was listed by James Donn among the heaths in cultivation at the University Botanic Garden, Cambridge, in the fifth edition of *Hortus Cantabrigiensis*, also issued during 1809. Messrs Conrad Loddiges offered plants of it for sale in 1811, and it was illustrated in the first volume of Loddiges' *Botanical cabinet* (plate 96) during 1817.

Subsequent publications suggest that this particular Cape *Erica* remained in cultivation in England into the early twentieth century: Hugh Low & Co. of Enfield were offering it for sale around 1905. (It is doubtful if true *E. savileae* is presently growing in European gardens although given its occurrence at relatively high altitudes it should be one of the easier Cape heaths to cultivate.)



Fig. 1. The Countess of Scarbrough's heath, *Erica savileae*, as illustrated in H. C. Andrews' *The heathery*, volume 5, plate 238 (1816) (By courtesy of The Lindley Library, Royal Horticultural Society, London).

AFTER WHOM WAS IT NAMED?

The text accompanying the plates in the first three volumes of Andrews' *Coloured engravings of heaths* was less than informative about the origins of the names which he published. Given that the same name appears in Lee & Kennedy's manuscript list of 1808, and that Andrews was the son-in-law of John Kennedy, one of the nursery's proprietors, we can safely assume that the name was given to the plant at the firm's nursery in Hammersmith.

But who was the person honoured? One of the comprehensive catalogues cultivated Cape heaths was that compiled for the Duke of Bedford before the end of 1824 by George Sinclair, and published early in 1825 under the title Hortus ericaeus Wohurnensis, Sinclair listed all the heaths growing at Woburn Abbey and generally provided an English as well as a Latin name. For E. "savilliana", Sinclair (1825) gave the English name "Countess of Scarborough's Heath", and this is repeated in other

publications of the period. However, a few authors seem simply to have translated the name – James Donn (1809) used "Saville's Heath", whereas Robert Sweet and John Claudius Loudon in their respective publications entitled *Hortus Britannicus* had "Savile's heath".

Given Andrews' silence about the origin of this name, we are left guessing which person named Savile was honoured, but there is important circumstantial evidence that it was the Hon. Mrs Richard Lumley Savile who, when her husband inherited the title Earl of Scarbrough in September 1807, became the Countess of Scarbrough.

THE COUNTESS OF SCARBROUGH

Henrietta Willoughby (b. 30 June 1766), daughter of Henry Willoughby, 5th Baron Middleton and his wife Dorothy, married The Hon. Richard Lumley Savile (1757–1832) on 25 March 1787. As a consequence of inheriting the Savile estates on the death in 1784 of his uncle, Sir George Savile, 8th Baronet, of Rufford Abbey, Richard had changed his name to Lumley Savile. More than two decades later, when his brother, the 5th Earl of Scarbrough died, unmarried, on 5 September 1807, Richard inherited the earldom, and so Henrietta became Countess of Scarbrough.

At first glance there is little indication that Henrietta was interested in gardening or botany – her name does not appear in any of the well-researched biographical dictionaries of British gardeners and botanists. Yet there are small, even tantalizing, clues that she really was the lady immortalized in the name of this beautiful heather.

First of all, there is an intriguing entry for 15 July 1807 in Henrietta's account book of the payment of £3. 5s. 0d to Lee & Kennedy. Given that this entry predates her changed status, the bill must have been addressed to her as The Hon. Mrs R. Lumley Savile. Was it for Cape heaths?

The garden accounts of Sandbeck Park, the Lumley family's Yorkshire estate, for the three years prior to 1810, just after Richard had inherited the property and title, show substantial expenditure; large payments to stonemasons and builders suggest that there was much restoration and extension work in progress. One interesting example from 1810 is for shading for a conservatory: "May 5th Thomas Brumby for Canvas for Covering the Summer Houses in Lady Scarbroughs Flower Garden [£]18. 15[s]. 0[d]". Could this have been to shade some Cape heaths?

At face-value neither of these payments suggests an over-ruling passion for gardening, but another item does. There survives a small leather-bound notebook, composed of paper that is watermarked 1809 – thus none of the entries can have been made before that year, and most probably not before 1810 – and the handwriting in it compares very closely with Henrietta's. The neatly written lists in the notebook are very remarkable. There are three separate inventories: the first is of "Ericas", the second, immediately following, is of "Geraniums"; the third is of other plants. Twenty-two pages – usually the left-hand page of an opening – are occupied by the heaths; 177 species and varieties are named. Among those listed under S is "Savillea" (spelled with double ll), and, most astonishing of all, there are eight names for which no *printed* record has so far been traced: cerinthoides [var.] capitata; droseroides [var.] major; incurvata [var.] nana; magnificenti; plukenetii [var.] alba; vestita [var.] brevifolia; vestita [var.] fulgens; vestita



Fig. 2. The Countess of Scarbrough's geranium, *Pelargonium scarboroviae*, as illustrated in Robert Sweet's *Geraniaceae*, volume 2, plate 117 (1822) (By courtesy of The Lindley Library, Royal Horticultural Society, London).

[var.] pinifolia. While the purpose of the list is not clear, the chances are that this was a list of Cape heaths that Henrietta had purchased – or wanted to purchase.

The clearest evidence of her interest in these plants is the association of heaths and geraniums in this notebook. Immediately following the Erica list are an almost equal number of pages containing the names of "Geraniums" - the names certainly refer to Pelargonium species from the Cape of Good Hope, and to their varieties and cultivars. Cultivar names were not in vogue for them at this time, yet Henrietta's notebook includes many such names: 'Lord Anglesey', 'Emperor Alexander', 'High Admiral' and 'Abdullah' under A, and 'Susanna', 'Splendid', 'Sydney' and 'Lady Scarbrough' under S.

A *Pelargonium* cultivar named 'Lady Scarbrough' (also listed as 'Countess of Scarbrough') is currently in cultivation and is commercially

available. *Pelargonium scarboroviae*, (Figure 2) "Countess of Scarborough's Stork's-bill" or "Lady Scarborough's Geranium", was described and illustrated by Robert Sweet in the second volume of his monograph on Geraniaceae (Sweet, 1822). According to his text, "Lady Scarborough's Geranium" originated as a seedling. Sweet had seen it and had it drawn in the "collection of Robert H. Jenkinson, Esq. who [had] received it from the Countess of Scarborough, in whose collection it had been raised ... and it is named in compliment to her."

Thus there existed at Sandbeck Park, at least in the late 1810s, a fine collection of unusual greenhouse geraniums (*Pelargonium*), including at least one that had been raised there.

Returning to *Erica*, we lack the *explicit* statement in the earliest published account of *E. savileae* that it was named after Henrietta. It is rather puzzling that the name, if it was coined to be a compliment to her as the Countess of

Scarbrough, did not follow the well-established pattern of using her title (as in the case of *Pelargonium*) – *scarbroviae* or *scarbroughiae*. We are obliged to conclude that the name was devised before her husband inherited the earldom in September 1807, when Henrietta was still just the Hon. Mrs Richard Lumley Savile. (It is notable that in her husband's meticulous record of his expenditure between 1787 and 1800, there are regular references to the housekeeping money which he gave to Henrietta, and every reference is either to "Mrs Savile" or "Mrs S.". Thus, although officially the family name was Lumley Savile, it was Savile that was most commonly used.)

There remains another possibility, a confusion of identities. It is always possible that *Erica "savileia"* does not honour the Countess of Scarbrough, but another person named Savile. Yet, there is no obvious candidate.

ERICA SAVILEAE, COUNTESS OF SCARBROUGH'S HEATH

As the Latin name of this Cape heath is a compliment to a lady, the termination must have the feminine gender. When Andrews first published the name in 1809, rules about the spelling of botanical epithets did not exist. Under the current *International code of botanical nomenclature* (St Louis Code), "savileia" (and it's numerous variants) must be corrected to *savileae*.*

There are numerous orthographic variants of the epithet:- in alphabetic order with the author and earliest recorded date, with a single l left-hand column, and ll right-hand column.

savilea (H. C. Andrews, c.1816: tab. [238]) savileana (R. Sweet, 1827: 261) savileia H. C. Andrews (1809: tab. [205]) saviliana (G. Sinclair, 1825: 22) savilii (R. Thornton, 1825: 138)

savillae (C. Loddiges, 1817: tab. 96) savillea (J. Donn, 1809: 92) savilleae (E. Regel, 1843) savilleana (J. Fraser, 1866: 19) savilliae (C. Loddiges, 1817: tab. 96) savilliana (Floricultural cabinet, 1836: 59) savillii (J. Miller, 1816: 44)

All these erroneous variants are to be corrected.

Whereas savileae follows the formulae noted for *lace-ae* in the quoted recommendation, scarboroviae (in *Pelargonium*) must not be altered to scarbroviae as it may be deemed a deliberate latinization, even when misspelled.

^{*} Under Article 60, Rec 60C1 "If the personal name ends with a vowel or -er, substantival epithets are formed by adding the genitive inflection appropriate to the sex and number of the person(s) honoured (e.g., scopoli-i for Scopoli (m), fedtschenko-i for Fedtschenko (m), fedtschenko-ae for Fedtschenko (f), glaziou-i for Glaziou (m), lace-ae for Lace (f), gray-i for Gray (m), hooker-orum for the Hookers (m), except when the name ends with -a, in which case adding -e (singular) or -rum (plural) is appropriate (e.g. triana-e for Triana (m), pojarkova-e for Pojarkova (f), orlovskaja-e for Orlovskaja (f))."

It must also be noted that since the creation of the earldom in 1690, the Earls and Countesses have always spelled their title Scarbrough, and not (like the town) Scarborough. "Countess of Scarbrough's heath" is the appropriate English name for *Erica savileae*, just as *Pelargonium* 'Lady Scarbrough' is the correct orthography for the "Countess of Scarbrough's geranium".

Finally, it must also be noted that Henrietta was *never* "Lady Savile": she was styled The Hon. Mrs Richard (Lumley) Savile (to September 1807) and (from September 1807) Countess of Scarbrough or Lady Scarbrough.

Henrietta died on 26 February 1846, having survived her husband by almost 14 years.

Acknowledgements

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Ales, beer and other Viking beverages – some notes based on Norwegian ethnobotany

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In a previous *Yearbook*, Nelson (2000) discussed the folklore of an ale made with *Calluna*, reputedly the strongest drink ever made. The recipe is attributed to the Vikings, of Danish and Norwegian decent. According to folk tradition, the way of making such ale was kept secret, and lost when the Vikings perished (see also Almqvist 1965, 1991).

Norway is situated too far north to provide any possibility for growing grapes. Wine was imported from central Europe during the Viking age, but its use was probably restricted to the wealthy and powerful (Reichborn-Kjennerud 1947: 155). Thus, it is not surprising that a number of ales and related brews were made instead, both with and without malt, and under various names (Reichborn-Kjennerud 1947: 152ff; Riddervoll 1997: 31). In the Norse *Alvísmál*, a dwarf answers Thor's question about what names øl (beer) was given in each world thus: "It is called øl by the humans, bjórr by the ases, veig by the vanes, the clear fluid by the jøtner [giants], mjød [mead] in Hel [the world of the dead], and sumbl by the sons of Suttung."

It is not easy to find equivalent English terms for all these. *Ol, bjórr* and *mungát* (mouth-good) may all be translated as beer (Bugge 1921: 90ff; Grøn 1927: 171). *Veig*, meaning a "strong drink" (Fritzner 1896: 896, Grøn 1927: 163), is encountered in other Norse poems as well, and is sometimes specified: *bjórveig*, *minnesveig* (memory drink) and *óminnesveig* (lost memory-drink).

In addition, old Norse had another term, $li\partial$, meaning simply a strong, intoxicating drink (Fritzner 1891: 50). The word is also known from other Germanic languages; in German, it may have meant fruit wine (Grøn 1927: 162).

In the old society, these drinks had important religious and social connotations (Lygra 1995). Hávamál describes how Odin acquired the art of poetry through his theft of the skaldic mead from Gunnlod, a female *jotun*. Intoxicating drinks were a source of wisdom – but also one that could lead to the loss of wisdom. To quote Hávamál, "the heron of oblivion hovers above the drinking bout".

Øl or mungát was a weak everyday beer (Schübeler 1886: 552; Bugge 1921: 91; Reichborn-Kjennerud 1947: 153), whereas strong beer for finer occasions was termed bjórr. The latter name may derive from German, and Schübeler (1886) suggested that the whole art of making strong beer with hops (Humulus lupulus) was imported from Germany. The Norse dictionary of Fritzner (1891: 748) treats øl and mungát as synonyms, meaning local beer, and different from bjórr or foreign beer (Fritzner 1886: 146, Reichborn-Kjennerud 1947: 153). Bjórr is mentioned repeatedly in the Norse poems, and Vøluspá mentions a bjórsalr, a drinking hall. Mungát, of much lower status, is mentioned only once in the Edda poems, where a man called Guttorm is served a soup of snake and wolf meat accompanied by mungát (Grøn 1927: 172) – hardly a recipe for a fine meal. Øl, on the other hand, is frequently mentioned, and stands out as an everyday drink both for humans and gods (Grøn 1927: 173).

Honey, old Norse *hunang*, is frequently mentioned in Norse poems, sagas and laws. Import of honey from the British Isles and the Baltic area during the late ninth century is mentioned in Egil's saga (Schübeler 1886: 554, Grøn 1927: 175). Though some honey may have been used to sweeten food, its main use was for making mead. The old laws imposed severe penalties for making or selling false honey.

It should also be noted that Norway, due to its northern latitude, was not self-supplied with barley, so that most malt probably was imported (Grøn 1927: 166). Malt is frequently mentioned in the old Norwegian laws.

In Viking-age Norway, $mj\varrho \partial r$ (in modern Norwegian: mjød) was considered a more prestigious drink than beer. The name itself means both mead and honey (Fritzner 1891: 722; Grøn 1927: 176), though the root is honey (Falk & Torp 1903–1906: 518–519). Contrary to ϱl , when $mj\varrho \partial r$ is mentioned, it is frequently accompanied by positive terms (Reichborn-Kjennerud 1947: 153).

BEER AND MEAD FLAVOURINGS

Several plant species have been used as a flavouring for beer. The most frequent additions in Norway may have been *Alnus* spp (not least to give a dark colour), *Myrica gale, Juniperus communis* and *Humulus lupulus* (Arentz 1802: 86–87; Schübeler 1886; Johan-Olsen 1900: 21; Olafsen 1910; Bugge 1921: 91; Grøn 1927: 169ff; Nordland 1969: 126–137, 203–215; Eckblad 1970; Borgen 1992), the latter probably not until the end of pagan times (AD 1000). Cultivation of hops is first documented by a decree issued in Nidaros (Trondheim) in 1341 (Schübeler 1886: 552; Olafsen 1910: 438; Borgen 1992), though a prohibition of stealing another person's hops is included in an old law, first put on paper in 1260 (Nordland 1969: 203).

Schübeler (1886: 549ff) lists a whole range of other ingredients used in beer, most of which may have been rather rare choices for this purpose. For some species, such use is reflected in vernacular names; ølgras (beer grass) for Filipendula ulmaria in interior South Norway (Høeg 1974: 364), ølkong (beer-king) for both Arnica montana and Hypericum perforatum (Schübeler 1886: 549; Høeg 1974: 389), ølkong (beer-king) for Geum rivale in Central Norway (Høeg 1974: 378), ølkall (beer-man) for Prunella vulgaris in Central Norway (Høeg 1974: 531), and ølkall [beer-man] and ølkong (beer-king) for Achillea millefolium (Schübeler 1886: 549; Høeg 1974: 171; Nordland 1969: 218). None of these names is widespread.

The sagas reveal that mead $(mj\vartheta \partial r)$, too, was flavoured with one or more plants (Grøn 1927: 177; Reichborn-Kjennerud 1947: 152; Hofsten 1960). The saga of St Olav mentions grasaðr mjøðr (herb mead), whereas "Barlaam ok Josaphats saga" mentions grasaðr drykkr (herb drink). Unfortunately, there are few clues as to which species were used, as rather few plants are mentioned by name in the sagas. *Filipendula ulmaria* is a likely candidate. It is called *mjødurt* (mead-herb) in Norway and Denmark, and *mjaðarurt* on Iceland (Gunnerus 1766: 77; Høeg 1974; Brøndegaard 1980); the English meadowsweet derives from the same root (Brøndegaard 1980: 25). In Norway, Gunnerus (1766: 77) and Tonning (1773: 126) noted that "some add the leaves to their beer, to give it a good scent and taste".

With a single exception, Norwegian sources do not explicitly mention Calluna as an ingredient in mead or beer. Such use is documented from the Valdres area in interior South Norway, where Kirkevoll (1940: 166) mentioned that "in some places, the finest shoots [of Calluna] have been used in beer together with hops". At Våler in Hedmark, Southeastern Norway, Nordland (1969: 219) recorded that "if one wanted ale with a special taste, or ale of a different kind, one could mix into it a kind of heather, or sisselrot [Polypodium vulgare], or varrow". Unfortunately, the heather species is not identified; it might also have been Andromeda polifolia (see below) or Ledum palustre. However, in South Norway, an unspecified lyng (heather) would usually imply Calluna (cf. Alm 1999). In neighbouring Sweden, Calluna is a wellknown ingredient in beer (Schübeler 1886: 550; Hofsten 1960).

Home-brewing of beer is still practised in parts of Norway, but the quantities produced are negligible compared to the industrial output of commercial breweries, largely established from the 1840s onwards (Johan-

Olsen 1900; Haug 1992: 30).

THE STRONGEST DRINK

In terms of alcohol contents, the strongest drink available in Viking-age Norway was over-fermented beer, which could possibly contain 10% alcohol (Reichborn-Kjennerud 1947: 150). Thus, it is obvious that alcohol alone cannot have made the Viking beverages "stronger" than any other alcoholic drink. Beer and mead were low-alcoholic compared to wine. Still, both Norse tradition and folk-lore abroad (see Nelson 2000; Almqvist 1965, 1991) ascribed extreme power to some of the Viking beverages. This reputation may of course be misleading, and simply reflect the Viking's not-too-well-behaved ways, particularly in a drunken state. Heavy drinking would certainly make things worse. According to Wille (1786), the old term <code>ølkveisa</code>, then still in use in Telemark, Southeastern Norway, meant "madness after drinking over-fermented beer, which affects them in many ways, causing numerous symptoms".

Other explanations should be considered; for example, the influence of additional ingredients – non-alcoholic, but perhaps as intoxicating. Reichborn-Kjennerud (1923) suggested that some of the worst past excesses of drunkenness could have been due to frequent contamination of harvested grain with the poisonous, fungus-infected fruits of darnel (*Lolium temulentum*). In old Norse, the grass was called *skjaðak*, derived from an Irish loan-word, *scethach*, the root meaning of which is "that which causes vomiting" (Marstrander 1924, 1928: 3; Reichborn-Kjennerud 1940: 153; 1947: 153). In modern Norwegian folklore, darnel is known either as *skjak* or *svimling*, in various dialect versions (Wille 1786; Anonymous 1801: 102–103; Aasen 1873: 672; Schübeler 1886: 276; Storaker 1928: 68; Reichborn-Kjennerud 1940: 153; Høeg 1974: 430), the latter meaning making dizzy. According to the Norse dictionary of Fritzner (1896: 352), *skjaðak* originally meant both "a sort of abnormal growth on [the grain] or a weed in the grain, which makes its consumption harmful". In the former case, infection with ergot (*Claviceps purpurea*) and resulting ergotism (cf. Reichborn-Kjennerud 1940: 155ff) is a possibility.

Ergot poisoning could be bad enough. In the late sixteenth century, Peder Claussøn Fries commented on the consequences of beer contaminated with ergot: "the beer becomes so head-strong and affects the human brain so hard, that if anyone drinks a pot of it, he can neither stand nor walk; this beer is called *Suiming* [in modern Norwegian: Sviming, i.e. becoming unconscious] or *Svimling*" (quoted from Storm 1881: 271; see also Grøn 1942: 194). A similar description is found in a topographical description of Heggen and Frøland in southernmost Norway: "[it] may justly be called *Svimling*, because grain

of this kind used for food or drink, makes people act as if they are drunk and dizzy, and also trembling, so that they are unable to do anything" (Anonymous 1801: 103).

Intentional addition of psychoactive plants cannot be ruled out. In the saga of St Olav, the guests at an inn in Tunsberg (now Tønsberg) were served the strongest *grasaðr mjøðr* or herb mead, whereupon they all feel asleep, followed by quarrelling and killings. Grøn (1927: 177) suggested that some narcotic plant may have been added, perhaps *Cannabis* or *Hyoscyamus*. This would certainly explain why Viking ale should be the strongest drink ever made – but no conclusive evidence has so far surfaced of intentional additions of this kind. Again, contamination with ergot is an alternative; it is reported to make people sleepy (Schübeler 1886: 277). A Norse term, *meinblandinn*, "mixed with something harmful" (Fritzner 1891: 141), or "made so that it had dangerous properties" (Reichborn-Kjennerud 1947: 152), for example *meinblandinn mjøðr* in Völsunga saga, suggests that harmful mead was well known.

Of interest in a heather context is an eighteenth century note on the use of *Andromeda polifolia* as a beer flavouring. It was recorded by Hans Jacob Wille in Telemark, Southeastern Norway, during his travels there in 1786. *Andromeda* is somewhat poisonous, and the resulting brew cannot have been very wholesome. Characteristically, Wille (1786) noted that people said such beer "made the head dizzy and caused vomiting and anxiety". Even less recommendable is the similar use of *Tanacetum vulgare*, suggested by vernacular names like *ølkonge* (beer-king) in Western and Central Norway (Høeg 1974: 288, Weisæth 1991: 75).

Achillea millefolium and Myrica gale may also have added to the intoxicating effect of beer or mead. In Rogaland, Southwestern Norway, yarrow is known as hardhaus (hard-head), a name which may reflect its effect on an average drinker (Nordland 1969: 223). From Sweden, Linnaeus reported (in his Lachesis naturalis manuscript) that yarrow brews made people crazy (cf. Hofsten 1960: 124). Myrica gale is reported to produce heavy intoxication and (not least) bad hang-overs, for example by Gunnerus (1766: 58), Wille (1786) and Høeg (1974: 457); the latter may have served as a social proof of a "strong" and thus satisfactory brew (cf. Nordland 1969: 222).

Ledum palustre is another likely candidate as a dangerous addition to the Viking ale. Its use as a substitute for hops is known from Sweden (Hofsten 1960: 126) and well-attested in German sources, among other Germanic tribes (Greve 1938, Sandermann 1980, Seidemann 1993); according to Sandermann (1980) and Rätsch (1996: 143ff; 1999: 179) such beer is psychoactive, at least

in large doses, but the main effect is causing a rage (and subsequent headache) in those who drink it.

Thus, various herbs may have been added to beer and mead in Norway, mostly to enhance taste (or camouflage a bad one), perhaps also to make the drink more intoxicating. Still, alcohol was probably the most dangerous component in most Viking beverages. Drunken Vikings could be rough company; the sagas contain numerous descriptions of drunkenness and – to put it mildly – rude behaviour. The saga of Egill Skallagrimson contains several colourful stories. Egill was not considered an easy man, even by Viking standards; he committed his first murder at the age of six or seven. When visiting a farm in present-day Sweden, he got senselessly drunk and thanked his host by vomiting in his face, a fate perhaps still preferable to that of another drinking-part host, who was pierced by Egill's sword.

With such habits, mead and beer were probably strong enough; certainly so if drunk in vast quantities. The sagas of Snorri Sturlusson gives some clues in this respect (Reichborn-Kjennerud 1947: 153). In *Ynglingjatál*, mead is mentioned as *furðu sterkr* ("extraordinarily strong"), and in the saga of St Olav, it is referred to as *hinn sterkasti*, "the strongest [of them]". Much later, in the eighteenth century, Wille (1786) commented on over-fermented beer in Telemark, Southeastern Norway, that "[even] modest consumption makes one drunk, and causes unbearable sickness".

It is likely, thus, that "the most powerfullest drink" was nothing more than mead or beer. Both could well have been affected by accidental ergot poisoning, or intentionally flavoured with herbs, of which *Calluna* is but one of several possible additions – and far from the most dangerous one attested in Norwegian folk tradition.

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Erica verticillata is brought back from the brink of extinction

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Fig. 1 Erica verticillata at Kirstenbosch

The story of *Erica verticillata* is probably unique in the annals of plant conservation in South Africa. This majestic *Erica* is thought to have become extinct in nature during the first half of the twentieth century. The most recent herbarium records in South Africa are of plants grown at Kirstenbosch in the early 1940s, whereas the latest records of the wild populations date from 1906.

There have been many debates, and there remains some scepticism, within botanic gardens circles and amongst conservation and botanical research organizations about the value of keeping collections of "wild" species in botanical or private gardens. *Erica verticillata* is testimony that plants preserved in cultivation can play an invaluable role in conservation.

This is the story of how *E. verticillata* has, with the help of a few dedicated collectors and growers, managed to claw its way back from near extinction to become one of the most popular Ericas in cultivation in South Africa.

DISCOVERY AND REINTRODUCTION

Erica verticillata used to grow on the Cape flats of the Cape Peninsula within a few kilometres of the Peninsula mountain chain. It preferred the damp, acidic, sandy soils found around Zeekloeivlei (Hippopotamus Lake), Wynberg, Kenilworth and along the Black River flowing towards Table Bay, but agriculture and urban development have destroyed these habitats.

In the early 1980s, Deon Kotze, the *Erica* horticulturist at Kirstenbosch, began a concerted search amongst the remnants of lowland fynbos on the Peninsula for lost or rare species. In 1984, a chance conversation between Deon and the Kirstenbosch scholar David von Well led to a significant discovery. David mentioned that a large, pink-flowered *Erica* matching the description for *E. verticillata* was growing in Protea Park, Pretoria. David confirmed the similarity when he saw the samples preserved on the herbarium sheets. He brought cuttings to Deon and flowering specimens to Ted Oliver who confirmed it was *E. verticillata*.

Protea Park was one of two parks in the Pretoria area that displayed collections of fynbos plants. No records exist of how the plants came to be there, but they are believed to have been introduced during the 1940s. Three very old plants were growing there, but two had died by the 1980s. Cuttings were collected from the remaining plant.

David Cooke, Temperate House Manager and *Erica* enthusiast at the Royal Botanic Gardens, Kew, heard about the rediscovery of *E. verticillata* from Kirstenbosch horticulturists while they were at the Chelsea Flower Show. He kindly sent cuttings of the Kew clone to Kirstenbosch with Graham Duncan.

A few years later a mature plant was discovered by Kirstenbosch garden foreman, Adonis Adonis, growing in a clearing in the forest behind the Braille Trail. It is surmised that this plant was a remnant seedling from the *Erica* collections that formerly grew on nearby terraces. (The Compton Herbarium contains a specimen of *E. verticillata* collected from plants growing in Kirstenbosch Gardens in 1943.)

These three clones have been successfully propagated and plants have also been sold from the Kirstenbosch Garden Shop and at the Annual Plant fair for a number of years.

ERICA VERTICILLATA

This is a handsome, strong-growing shrub, which can reach 2 metres. Mauvepink, tubular flowers, 15–20 mm long, are produced near the ends of sturdy branches. These are arranged in neat, stepped whorls that form attractive flower-heads from January to March (in the southern hemisphere). The whorled arrangement of the flowers and leaves gave rise to its name: verticillatus = whorled.

The **Pretoria clone** is the most attractive one with its sturdy, erect habit and neat, dark green leaves. The flowers are deep pink and evenly presented in whorls forming a dense array of blossom near the ends of the branches. Mature plants reach a height of 2 metres.

The **Kew clone** has a less uniform habit, long arching, lax branches and pale green leaves. The flowers are light pink and often bunched unevenly giving a rather untidy appearance.

The **Kirstenbosch clone** is similar to the Pretoria clone in leaf and flower arrangement although the plant does not attain the same stature, rarely reaching 1.5 metres. The flowers are not ordered in neat whorls as the Pretoria clone and the colour is a lighter pink.

SEQUEL

One might have thought that this was the end of a happy tale of survival, but not so. The computer age has its benefits! About three years ago, horticulturists at Kirstenbosch and other botanical gardens in the National Botanical Institute started to contribute to a program of writing about South African plants with horticultural interest (www.plantzweb.co.za). My chance came to write about *E. verticillata* and I asked Dr Ted Oliver to check my article before it was put on the web. His main comment was that there are not three clones of the species, but four. A telephone call revealed that in 1968 he had seen plants in cultivation in the nursery at the Belvedere palaces in Vienna. He remembered that there was quite a good collection of southern hemisphere plants, which were meticulously cared for, at the palace*. The plants were grown in containers and moved indoors each winter and out again for the summer.

Ted made contact with Dr Michael Kiehn at the University of Vienna, and through their efforts we managed to get the fourth clone of this lovely species. As a bonus we found that they also had plants of *E. turgida*, another Cape lowlands species, which has recently become extinct in the wild.

^{*} See footnote by Dr. E. G. H. Oliver, p. 50.

The process of retrieving these species proved most difficult, with restrictions on importing the plant material into South Africa being the biggest challenge. The back-and-forth communications between myself, Dr Kiehn and Schönbrunn Garden attracted the attention of the Austrian Ministry of Agriculture and the South African Embassy in Vienna. An official handing-over ceremony was arranged when the Austrian Minister of Agriculture and the Environment, Dr Wilhelm Molterer, presented the Ericas to the South African Ambassador, Professor Alfred T. Moleah.

My chief concern was the survival of the cuttings. In the end the material was brought in the diplomatic bag only to disappear from the airport. Arrangements to meet the ambassadorial representative at Cape Town International misfired and after desperate calls I tracked him down to a hotel near the city. Eventually I took possession of the valuable package late one Friday evening and spirited it away into safekeeping. There were two packs of cuttings, one labelled "red" and the other "pink". This was most intriguing, as the plants have only been propagated vegetatively during the decades that they have grown them.

I contacted the horticulturist at the Schönbrunn Garden, Michael Knaack, who confirmed that the red-flowered plant arose from cuttings, but that no written records exist about it. He also mentioned that the plants were mostly in a poor condition being yellow and lacking in vigour.

We have rooted the cuttings and impatiently wait to see the flowers early next year.

VIENNA PLANTS

The history of the plants growing at Schönbrunn Garden goes back a long way. Gardeners, Franz Boos and Georg Scholl, were responsible for collections made at the Cape of Good Hope between 1786 and 1799. Boos was a botanist as well as a gardener whereas Scholl was a working gardener with little scientific knowledge. Emperor Joseph II of Austria sent them to make collections of tropical plants from Mauritius, but their stop at the Cape was longer than planned. Boos stayed for one year and then went on to Mauritius leaving Scholl behind. Boos returned to the Cape in 1788 and remained for only a few months before returning to Vienna in July 1788. Scholl stayed at the Cape throughout the 1790s and grew plants in a holding garden referred to in the literature as "Gordon's Garden". The precise locality of this garden is not known, but it was somewhere in Cape Town. Many plants were established there before being shipped to Europe. Scholl finally returned to Vienna in 1799 bringing with him a large collection of living plants.



Fig. 2. The Pretoria clone being visited by a sunbird.

Dr Kiehn and staff Schönbrunn Garden believe that the Cape Ericas in the garden date back to the Boos and Scholl collections. If the extant plants of E. verticillata are directly descended from ones collected by Scholl or Boos, it proves that, given the right techniques and the work ofdedicated horticulturists, species can be preserved for very long periods away from their natural habitats. This is a comforting thought since the pressures on natural habitats have increased many fold in the past 100 years threatening many more species.

RETURN TO THE WILD

As noted, all the natural habitats, save one, of *E. verticillata* have been destroyed. The nature reserve at Rondevlei (Round Lake) has, fortunately, been set

aside for recreation and education. Mr Dalton Gibbs, Conservation Manager for the Cape Metropolitan Council, reintroduced the Pretoria clone to this reserve in 1994 with limited success. He planted ten plants in a transect from the drier sand dunes across a range of habitats ending in the wetland. Only one plant survived, but this indicated that the species preferred the zone between the dry and wet soils.

Some more plants were established at a second site in 1995, 1997 and 1998. This land had been reclaimed, burnt and re-seeded. The plants established well and have reached around 1.2–1.5 metres in height. They attract nectar-seekers and pollinators such as the Lesser Double Collared Sunbird, hawk moths, and black and yellow bumble bees. In 2001 the Kirstenbosch clone and *E. turgida* were also planted in the reserve.

The plants of *E. verticillata* at Kirstenbosch and Rondevlei appear to produce very little viable seed. This does not bode well for the long-term

survival of the re-established population. The next step is to have the plants analysed to establish whether the clones are from different collections. This will help establish the size of the genetic pool we are dealing with and hopefully verify that the clones represent the pure species.

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Footnote by Dr. E. G. H. Oliver (1 November 2002)

I am pretty certain that the material of *Erica verticillata* grown in Vienna's Schönbrunn Garden had its origins in seed sent from the Cape in the earlier half of the nineteenth century.

In 1968 when Dr Hans Dulfer (1900–1970) and I walked together around the nursery-yard at the back of the Belvedere Palace, I told him I was amazed at the "odd" selection they had there, particularly *E. turgida* which nobody else had thought of growing (I think Kirstenbosch started looking at it at about that time). They also had a *Leucadendron* (Proteaceae) which seemed highly unlikely to have been obtained from recent twentieth century seed sources in the Cape.

Dr Dulfer said he had tried to assess the origin of the plants and was told that an old gardener remembered it from his very early days and he had been told when he was young that the material had come from the early collectors. The material of the Cape species was dutifully propagated from cuttings every four or five years as had been done for "generations", and the plants were put out in their regimented rows in peat beds in summer to flower and then taken back into the glasshouse at the first sign of frost. Heaven knows what kept them doing this for all those years because the collections were not seen by the public, only by the staff in the nursery.

Religious associations of heathers in Spain

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As noted by Frazer (1907–1915: 2: 7) the worship of trees has played an important part in the religious history of Europeans. Beliefs linked to heathers occur especially in those areas under the influence of the Atlantic Ocean, where these plants are so abundant and where Celtic culture flourished. Two examples are the use of heather shoots to ward off evil spirits in Britain, and to induce rain by burning them, with ferns, out of doors (Rivera & Obón 1991: 506).

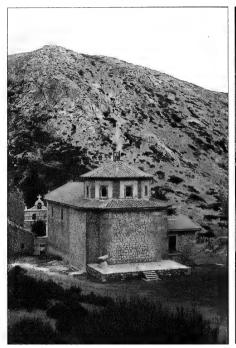
In Spain, where heathers are especially common, a wide range of uses, ideas and beliefs have developed around these plants, to such an extent that we may refer to a "heath culture" (Pardo de Santayana, Morales & Ramón-Laca, 2002). In some parts of Spain, heathers also have religious associations.

VIRGINS OF THE HEATH IN CASTILE

In Spain, it is a common fact that The Virgin Mary has received many different dedications some of which are derived from the names of geographical, geological or botanical features. These often stem from the location of hermitages and shrines that in turn may derive from places where images of The Virgin were miraculously discovered after the Muslims retreated to the southern extremities of the Iberian Peninsula. Thus we have dedications such as Nuestra Señora de la Oliva – Our Lady of the Olive (Olea europaea) – in Saragossa and Cádiz, of Atocha (esparto grass, Stipa tenacissima) in Madrid, of Encina (holm oak, Quercus ilex) in Ponferrada, of Lidón (nettle tree, Celtis australis) in Castellón de la Plana, and of Pino (pine, Pinus canariensis) in the Canary Islands. It is not surprising to find in Castile, in the northwestern part of the country, two sanctuaries where The Virgin is venerated under dedications alluding to heaths.

Nuestra Señora del Brezo (Figure 1) – Our Lady of the Heather – is situated in the province of Palencia, high in the Sierra del Brezo – Mountains

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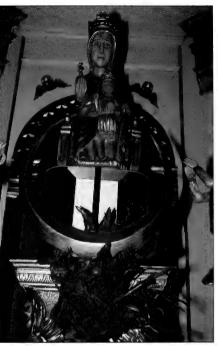


Fig. 1. The sanctuary of Nuestra Señora del Fig. 2. Romanesque image of Nuestra Señora Brezo, Palencia

del Brezo, Palencia

of the Heather – 1360 metres above sea-level (UTM: 30TUN6045), two kilometres north of Villafría de la Peña. The shrine comprises a neoclassical church, built in the eighteenth century, to which two wings, used as guest quarters, were later added. When visiting the shrine on 9 September 2001, Ramon Morales and Manuel Pardo de Santayana realized that the shrine is situated exactly on a line of contact between limestone and siliceous rocks. The surrounding vegetation is composed of shrubs including Calluna vulgaris, Erica arborea, E. australis, E. cinerea and E. vagans.

The Virgin is venerated here in the form of a Romanesque image (Figure 2), dated to the thirteenth century, which has been restored recently, representing The Virgin with The Child.

According to a local legend, in 1478 The Virgin appeared in a dream to two shepherds from Extremadura called Pedro and Diego and urged them to proceed to Fuente del Brezo - the Spring of the Heather - and to look for an image that was hidden there. As the dream was repeated three times, the shepherds paid attention to it, went to the place and found the image. Then a hermitage was built, which later gave place to the shrine.

There is an annual pilgrimage to Nuestra Señora del Brezo. On the second Sunday in May, the image of The Virgin is moved from Villafría to the shrine, and on 21 September the Feast of The Virgin of the Heather is celebrated, complete with *romería* – dance(s) performed in the open-air. This is a tradition with deep roots in the surrounding countryside.

Nuestra Señora de los Brezales – Our Lady of the Heather Moors – is also in Castile, in the province of Soria, three kilometres from the village of Espejón and just two kilometres from the border with the province of Burgos. It is situated 1060 metres above sea level (UTM 30TVM7833). The vegetation of the locality is dominated by pines (*Pinus sylvestris* and *P. pinaster*) and oaks, both deciduous (*Quercus pyrenaica* and *Q. faginea*) and evergreen (*Quercus ilex*). In this particular place several heathers are also reported – *Calluna vulgaris*, *Erica arborea*, *E. cinerea*, *E. scoparia*, *E. tetralix* and *E. vagans*. These compose the main shrubby vegetation and give the name to the local river, Rio Brezales (river of heaths) and also to The Virgin of the local hermitage.

The annual pilgrimage to Nuestra Señora de los Brezales is on Whit Sunday. A *fiesta* is organized by young men who dance all the way from the village to the hermitage; they perform a special dance – *jota* – during which they are always facing backwards so that they can watch The Virgin being carried after them.

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ERICA 'AFRICAN FANFARE'

In 2000 Barry Sellers' parents found two Cape heaths in a garden centre near Southampton. One had beetroot-purple tubular flowers, the other was bi-coloured, white at the base mauve pink at the tip. Cuttings were taken and the original plants potted up into 20 litre pots. A year later when they flowered both plants were identical, the bi-colour effect was later found to be due to low light levels (flowers late in the season are bi-coloured too). The figure above shows one of these plants in 2002.

Barry had the good fortune to visit Sydney in 2001 and the even greater fortune to be supplied with some Cape heaths by Society members Darren and Jenny Phillips of Ericaflora amongst which was one labelled "*Erica linnaeiodes*". Barry wasted no time in getting cutting material posted back to me. Ted Oliver has confirmed subsequently that this Australian material is a hybrid (derived from *E. verticillata*) and definitely not *E. linnaeoides* H. C. Andrews.

This year, I have been able to grow similarly aged plants of the Southampton clone, the so-called *Erica "linnaeiodes"* and another labelled *Erica "doliiformis"*, which I have had since the mid-1960s.

Charles Nelson has undertaken a thorough examination of the three clones and clearly they are all the same. Thus to avoid further confusion this *Erica* has now been given the cultivar name 'African Fanfare'.

D. J. SMALL

Growing Ericas on the Cape Peninsula: a Capetonian's perspective.

Ross Turner

601 Roslyn Gardens, Roslyn Road, RONDEBOSCH 7700, South Africa.

Being a keen ericologist it is interesting to note that Cape gardeners have historically shunned the many beautiful species of this genus as garden subjects. To be sure, certain species are extremely difficult to cultivate but there are also those that respond well to cultivation under a variety of environmental conditions. Today a growing number of nurseries offer seedlings at reasonable prices and, as a result, Ericas can now be found in many Cape gardens.

Southern African Ericas are often confined to very small geographical and micro-climatic areas in the wild, requiring specific rock or soil types as well as certain aspects and amounts of precipitation. Such localised endemics can be prolific where they occur, very often an isolated mountain slope or peak. It is a mystery then as to why an identical habitat not even one kilometre from such a locality will not support the same species. Such an example would be the habitat of the spectacular *Erica junonia*.

Surprising, furthermore, that European gardeners have had such a long and successful association with the genus, producing many exquisite hybrids and cultivars. During a visit to London in February of 2002, it was astonishing to see dozens of small gardens in Merstham, Surrey, boasting well-pruned specimens of *Erica cinerea* and *Calluna vulgaris*. Never before had I seen Ericas used as effective, well-pruned hedgerows!

At this point it must be confessed that I am by no stretch of the imagination a professional horticulturist. Instead, I have approached the growing of Ericas as a means to become *au fait* with the 765-odd species occurring in southern Africa.

The largest genus in a Floral Kingdom of more than 8600 species, *Erica* demands regular reinforcement of individual species characters if one is to accurately compare or diagnose different species. What better way to begin this process than to establish an indigenous fynbos garden with a bias toward ericoid plant forms?



Fig. 1. Erica glandulosa

At present there are about 40 species enjoying the cool, steep, terraced slopes of our family home in Misty Cliffs on the southern end of the Cape Peninsula.

The first stage in developing the garden was to prepare the terrace plant-beds. A friend and landscaper laid a metre-thick layer of reasonably dark but acidic soil and created sandstone rockeries around bricked pathways. Certain portions of the garden were designated as "seepageareas", collecting run-off from roof drainpipes. A simple PVC piping sprinkler system was then added, nozzles positioned near ground level to minimise water wastage through evaporation. By planting indigenous Fynbos species one also radically reduces the need to irrigate. The basic layout was then left to settle for two months before planting began.

As well as being a waterwise garden, the many species from different genera serve to attract a variety of birds, insects and mammals to the home environment.

In the Cape a brightly coloured, tubular flower will undoubtedly attract Lesser Double-Collared Sunbirds, Malachite Sunbirds and Cape Sugarbirds. These technicolour birds actually create mental maps of landscapes as well as localities of specific plant populations. Individual birds can therefore be seen re-visiting flowering bushes of *E. versicolor*, *E. glandulosa* and *E. mammosa* throughout a flowering season.

Insect-pollinated species such as *E. imbricata, E. baccans* and *E. irbyana* also create feeding possibilities for mammals such as the Large Spotted Genet and Small Grey Mongoose, both common visitors to the garden. On a warm summers' night I once woke to find a bold Genet exploring the folds of my bedcovers!

The largest, most mischievous and regular visitor however, is the Cape Chacma Baboon. These highly resourseful primates are well known for their





Fig. 2 Erica abietina subsp. phylicifolia

Fig. 3. Erica regia var. variegata

ability to sniff out ripe bulbs. Members of the Liliaceae and Orchidaceae are therefore particularly at risk and, to the annoyance of many gardeners and farmers, baboons usually uproot entire plants, taking only one bite from each bulb. Fruit trees are obviously a no-no on the Southern Peninsula! Imagine my surprise one afternoon when I observed a sturdy male baboon despoiling my only plant of *E. nana*! The tubular, yellow flowers were being individually picked, a delicately purposeful action, and the sweet nectar sucked from the base of the corolla. No amount of barking or posturing on my part could deter this baboon from its dessert.

For several years I considered this incident to be an unusual display of opportunistic foraging, until recently while exploring Kanonkop in the Cape of Good Hope Nature Reserve. A troop of approximately 30 baboons had languidly moved to within 20 metres of my position and I noted that a third of the troop had the purple, sticky, tubular corollas of *E. abietina* subsp. *phylicifolia* (formerly *E. phylicifolia*) stuck to their coarse coats. This struck me as an unusual manner in which the species could be potentially pollinated, foraging baboons visiting individual plants within and between populations, although under normal conditions pollination would be effected by Sunbirds.

Animal antics aside, it is presently spring in the Cape and several Ericas in the garden are enjoying the combination of longer sunlight hours and

relatively moist soils. *E. fourcadei* and *E. versicolor* are in full bloom. Both are easy to grow and will self-seed, especially if planted in pairs. The two-toned 'variegata' form of *E. regia*, which may flower at any time of year under cultivation, is another handsome tubular species worthy of mention. *E. scabriuscula* (*E. gibbosa* incl.) from the Southern Cape displays hundreds of white, urn-shaped flowers during September and October and attracts many bees. This species has flat, relatively open-backed leaves for an *Erica* and also seems to be easily grown. Another attractive bee-pollinated species is *E. baccans*, the name referring to the many wine-pink, urn-shaped flowers appearing at this time of year.

Other species in full bloom at the time of writing include *E. coccinea*,

E. formosa, E. imbricata, E. irbyana, and E. ovina.

Many *Erica* and other fynbos species germinate during winter and spring and most do not take kindly to soil disturbance as they have fine, shallow root systems. If a self-seeding garden is desired, this should be avoided. Most Cape Species are also adapted to nutrient-poor sandstone rock and derived soils, this being a good reason not to add rich compost or fertilizers to the soil. Mulching is beneficial and garden cuttings can be dried, chipped and placed on the soil surface, aiding moisture retention. When planting an *Erica* it is also advisable to add a handful of dry pine needles or bark to the prepared hole. This helps to create acidic soil conditions which in turn aid the development of mycorrhizal root associations which are essential if the seedling is to fix nitrogen and grow healthily.

Thankfully, successes in the garden have outweighed failures!

During spring the Cape Folded Mountains are also alive with new growth, a myriad of hiking routes available for fynbos enthusiasts to explore. Hopefully within the next month time can be found to do some much needed

pruning on our simulated fynbos slope!

In conclusion the Turner family would like to say that they look forward to meeting members of The Heather Society when visiting to the Cape. Tea on the slopes of Misty Cliffs with a backdrop of Southern Right Whales in the Bay?

Erica hybrasiliensis

MARGARET ELPHINSTONE

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... I took a deep breath, and struck out in a straight line up and west through steep woods of birch and aspen, mixed up with tree heathers as tall as I was, all in flower now with the bees buzzing over them. Hy Brasil has its very own species of tree heather, *Erica hybrasiliensis*. It pleased me to assume that this was it, although I wasn't at all sure. (*Hy Brasil*, p. 348)

The narrator of this extract is a character in a novel, a young woman sent to write a travel book about the mid-Atlantic archipelago of Hy Brasil. Hy Brasil, for those unfamiliar with the place, is the name of the mythical Irish island to the west where ships are wrecked and all hopes die. Or, in a more cheerful manifestation, Hy Brasil is St Brendan's Promised Land, the pagan paradise of Tir N'an Og, which is the Irish version of the Gardens of the Hesperides. Gardens and orchards are a strong strand in the legends; plants, we are frequently informed, are eternally in both flower and fruit. This must make them either fabulous or tropical, but the only specific endemic flora mentioned is apples (variety: symbolic), which suggests something rather further north.

The idea for a novel set in Hy Brasil germinated slowly over several years. I was browsing one day in a bookshop in St John, New Brunswick, and I found a book, *Phantom islands of the Atlantic* ¹ which not only described Hy Brasil, but even provided maps, of a sort. Not long after I came across William Babcock's *Legendary islands of the Atlantic* in a secondhand bookshop.² He mentions that Terceira in the Azores is one of the many possible originals for Hy Brasil. My elusive islands were beginning to take shape. Neither book said anything helpful about native flora, but I'd been on enough real islands to be able to endow these islands of the imagination with an ecology and an endemic vegetation, albeit in fairly vague terms, at least until I could decide upon a latitude.

As my mythical island took shape, Hy Brasil seemed to be the right name for it. I deliberately drew on myths, legends and stories. I incorporated ideas and descriptions from texts as diverse as Plato's *Atlantis* and Stevenson's *Treasure island*. I also drew extensively on my actual, as opposed to literary, travels in islands and island groups: the Scillies, Hebrides, Orkney, Shetland, Faroe, Iceland, Greenland, Newfoundland, the Azores ... I like islands.

A curious aspect of fiction is that while one is quite free to imagine enormous changes in the real world - to construct a whole island group and a new nation, for example - one does one's very best to be accurate about details. Only thus can one make imaginary places come true in the reader's mind. The members of The Heather Society will, I hope, forgive me for raising the North Atlantic Ridge by about 12,000 feet in one crucial spot (the exact bearing can be worked out from various small clues scattered throughout the novel). They may suspend disbelief when I tell them of a little, entirely fictional, nation that swayed the course of Atlantic history and discovery. But if I were wrong about *Erica hybrasilensis* they would have every right to throw the novel away in disgust. The game is to make the island, once imagined, as real as possible. That means getting it right.

Erica hybrasiliensis was conceived by analogy, and born of my imagination. I lived in Shetland for many years, and, amateur though I was (and am) the peculiar variations of island species could hardly fail to attract my attention. I worked in Shetland Library, where the returns trolley, which stood right by my desk, was always loaded with books about seamanship, exploration, navigation, and, of course, small islands. From that trolley I picked The voyage of the Beagle, as well as books about other islands: places like Tristan de Cunha, Ascension Island and South Georgia: reading matter which I would one day bestow upon my fictional heroine. From Wallace's Island life to summer walks in Shetland was a short step: it didn't occur to me then that the debate over Shetland mouse-ear (Cerastium nigrescens, recognised as a new species by the nineteenth-century Shetland naturalist Thomas Edmondston) would help me create a fictional world, but that was probably where Erica hybrasiliensis first took root in my subconscious.

Years later, my research for Hy Brasil finally took me to the Azores (it's tough being a novelist). Schooled by my years in Shetland, my attention was immediately attracted when I read about the unique subspecies of tree heather, *Erica scoparia* subsp. *azorica*. For an amateur like me a tree heather impinges upon the consciousness as a mouse-ear does not. In fact I couldn't miss them. Was it Darwin who said that plants which are quite small on the mainland can often produce big tree or shrub species on islands? We stayed at Furnas on São Miguel, where the garden of Terra Nostra Hotel was created in a volcanic caldera four miles across. Here endemic species, threatened by intensive agriculture elsewhere, are allowed to flourish. In the shelter of the caldera, surrounding the hot springs, everything seemed magnificently lush. I'm not sure if the tree ferns, as well as the heathers, are native, but they are certainly spectacular. It occurred to me, as I strolled along the gravel paths,

and bathed in the sulphurous pool fed from the hot springs, that the caldera at Furnas was about as close to the Gardens of the Hesperides, the Earthly Paradise, as anyone in the real world could get.

Hy Brasil acquired its tree heathers when I was walking on the remote island of Flores. The steep slopes of the island are divided into small green meadows by startling hydrangea hedges (I was told the hydrangeas only arrived about a hundred years ago, but they've certainly made themselves at home). In between the hydrangeas, and in the dramatic gorges where even terracing is impossible, we found our first tree heathers growing in the wild. They grow even more luxuriantly in the high mountain meadows of Pico das Caldeirinhas on São Jorge, and it was here that I decided that my heroine would encounter tree heathers in all their glory when she climbs the highest mountain in Hy Brasil, Mount Brasil.

I was delighted to receive a letter from the Editor of The Heather Society, saying that my mythical tree heather was to be honoured by an entry in the *Yearbook of The Heather Society. Erica hybrusiliensis* M. Elphinstone **sp. fabula** is about the highest compliment my novel could have received. It's a pleasure to have had a reader who not only knows far more than I do about my imaginary heather, but who is prepared to enter into the game. This is how imaginary islands are propagated; I'm happy to know that a cutting from my story has taken root in your journal. And so the story goes on.³

Notes

¹ **JOHNSON, Donald S., 1993.** *Phantom islands of the Atlantic.* Goose Lane Editions, Frederickton, New Brunswick.

² American Geographical Society research series no. 8 (1922). New York.

³ Editor's note: see p. 69 for details of *Hy Brasil*.

THE HEATHER SOCIETY'S PROCEEDINGS

THE SOCIETY IS 40 YEARS OLD



First General Meeting on 25 September 1963 held at the New RHS Hall, Westminster. Left to right: Miss Kellam Smith, Col. MacLeod, L.W. Smith, Constance MacLeod, Miss Cording, F.J. Stevens, Sir John Charrington, P.S. Patrick and D.F. Maxwell.

Annual Gathering & 31st Annual Conference, Washington, County Durham

ARRIVAL

The 2002 Conference took place at Washington, County Durham – ancestral home of the Washington family whose most famous son was named George. It was held a week earlier than usual this year, starting on 30 August. Despite this earlier start, the countryside we passed through on our way to Washington was reminiscent of every other Heather Society conference we

have attended, for it was harvest time. We were favoured throughout the weekend with warm sunny weather. As we travelled around Durham and Northumberland on our various tours, golden sun shone down on ripe cornfields, or more usually on fields of newly cut stubble, making a golden setting for the Conference.

The Chairman's welcome on our first evening was anticipated to some extent as we gathered for tea on arrival when old friends greeted each other and made some newcomers welcome. Arnold Stow however extended a special welcome to those who had come over the sea to be with us – Eileen Petterssen from Norway, Judy Wiksten from the USA, and Susie and Alan Kay from Ireland.

The conversations that go on at the start and between formal items in the programme are an important part of Conference proceedings. Apart from the friendships that develop, one can learn so much from the expertise of fellow enthusiasts.

Rose Cottage and the moors of the County Palatine – Durham

The first event was a talk by David Plumridge, well illustrated with slides and spiced with irreverent North-country humour. David's main aim was to describe the heather garden which he and Rita have created at Rose Cottage, Castleside, County Durham, but he began by telling us about the nearby heather moors. A tour later in the conference took us across these moors on our way to visit Rose Cottage so I will remark on the talk and visit together. For me, the visit to Rose Cottage was a high point of the Conference but it came as a shock when the Chairman reminded us that our last visit was in 1989.

David Plumridge noted that Lord Lambton owns much moorland in Durham and has it maintained for grouse shooting. Moors are soon overgrown by bracken unless sprayed and a session of spraying may cost up to half a million pounds. However, sportsmen pay up to one thousand pounds per gun which no doubt helps defray costs. There is a ten-year cycle of burning the moors to encourage the heather to regenerate. Sheep graze the moors – around one animal per acre is enough to chew up emerging birch while avoiding overgrazing. Beekeepers get about 90lbs (45kg) of heather honey per hive in a good season. The Durham moors are dominated by ling (*Calluna vulgaris*) but there are splendid stands of bell heather (*Erica cinerea*) and cross-leaved heath (*E. tetralix*) where the environment is suitable. There is also some bilberry (*Vaccinium myrtillus*).



Fig. 1. Members admiring David and Rita Plumridge's garden at Rose Cottage.

There are fields around Rose Cottage, which was once a church schoolhouse, and a garden of about an acre. Not all of the garden is given over to heathers. There is a lawn to one side of the house, a well-stocked vegetable garden and a glasshouse beyond the heathers, and appropriately enough, a bed of Rugosa roses at the front. David and Rita started the heather garden about 20 years ago and it is situated at the rear of the house. It is a very lovely example of a traditional heather and conifer garden, beautifully set out and immaculately kept. The climate in this part of County Durham is harsh with short summer seasons and cold winds in winter. Really bad winters can cut *Erica* ×*griffithsii*, *E. vagans* and *E. arborea* to the ground but they come back. David explained that this has a positive side in that *E.* ×*darleyensis* and *E. cinerea* have long flowering seasons. Indeed we were impressed to see many of the latter in full, fresh bloom.

During our visit there was much jockeying for position by photographers. Some of us were keen to outdo the pictures we had taken 13 years ago.

ALNWICK CASTLE

On Saturday we went to Alnwick, Northumberland, to see the ancestral castle and garden of the Percy family, formerly earls, and now dukes, of Northumberland. Harry Hotspur was probably the most famous, if not the most accomplished, member of the family. We visited the garden in the morning and the castle in the afternoon. Bill Devonshire, one of 70 volunteers who serve the garden trust, met us in the ornate Guest Hall to tell us about the garden. This hall, situated in the inner bailey of the castle set the atmosphere for the day. There were antlers, animal skins and shields painted with armorial designs on the old stone walls and the oak timbers of the roof absorbed much of the light to give overall a gloomy, mediaeval air. Bill, who later guided our garden tour, told us that the 12-acre garden had originally been created around 1770 but it had fallen into disrepair. However the present Duchess began a major reconstruction in 1996 and, in support, the Duke created an independent charitable trust to finance and manage the new garden. Four million pounds have already been spent on the project and a similar amount has yet to be raised to complete the work. There are many other impressive statistics associated with the project. Water is a feature of the new garden and the well-named Grand Cascade is spectacular. It incorporates 124 jets, which send water cascading down 21 steps. The jets are computer controlled to give a 30-minute cycle of waterspouts. This was a good tour, well led by Bill though I did not see any heather!

In the afternoon we were guided round the castle, founded in 1309 and built of honey coloured sandstone, some of it now blackened with age. It has a central keep and two bailies. The fourth Duke added new more comfortable apartments in the eighteenth century and decorated them in the Renaissance style. The family still uses the castle as one of their residences.

BELSAY

A new day saw us crossing the Tyne once more, this time to visit the gardens of Belsay Hall. Paul Harrington, head gardener, described the estate and led us on a tour of the gardens. Belsay is further north than Rose Cottage, where the climate has already been described as harsh. In fact Belsay is north of the $55^{\rm th}$ parallel (compare New York at $41^{\rm o}$ N and Oldenburg at $53^{\rm o}$ N) and on the east of England, unblessed by the "Gulf Stream".

The neo-classical Hall was built in 1815 by Sir Charles Monck and stands in 30 acres of landscaped park. Sir Charles also established the gardens and his work was carried on by his grandson, Sir Arthur Middleton, who lived in the Hall until 1931. The Middleton family abandoned the Hall after World War II and the estate was taken over by English Heritage in 1984.



Fig. 2. Part of the conducted tour around the gardens at Belsay Hall.

There are now 10 gardens sheltered by high trees and these include a *Magnolia* garden and a Winter garden. The latter includes heathers, some donated by the Society, and a seat in memory of our late member Joan Lister. There was *Erica carnea* at Belsay around 1900, before the Backhouse introductions. These collections were therefore at the formative stage of heather gardening. Sir Charles is thought to have planted some of the tree heathers (*E. arborea*) which still grow here. The gardeners have progressively cut these cut back almost to the ground because they were getting too big. They are now growing away vigorously. Among the other species were *Erica terminalis* and *Pieris formosa*. Unlike typical heather gardens, the heathers are not planted in groups, but are used with other species in borders which edge a large lawn. There were several white-clad people playing bowls on the lawn, looking incongruous in a green world – the emerald lawn, towering green trees around and a pale blue summer sky above.

A plantation of rhododendrons dates back to 1904 but the progressive gardeners are now establishing a national collection of lilies. One snippet of information was that 60 tons of limestone gravel are used each year to maintain the paths. Happily, the gravel destined for the heather garden is first washed to remove limestone powder but with the centuries time-frame of these gardens one wonders.

Half a mile to the west of the Hall there is a fourteenth century towerhouse and between the two buildings is a hill from which the sandstone for the later house was quarried. The quarry is about 15ft (5m) deep and pursues a sinuous path through the hill. Moreover, yew, sycamore and birch grow at the top, up to the very edges of the quarry faces, their roots clinging to the shallow soil and growing into the living rock. Plants in the quarry are in these ways protected from the cold northeast winds of winter and enjoy a favourable microclimate. The temperature in the quarry is only a degree or two higher than it is outside but temperature variations are evened out by the massive thermal storage of the quarry sides. These conditions were exploited by Sir Charles, and he created a wonderful quarry garden which has been maintained and developed by his successors. Plants that would be unthinkable in a normal Northumbrian garden live happily there. There is a Chusan palm (Trachycarpus fortunei) given to Sir Charles by the great Sir William Hooker and it was looking fine on our visit. The quarry atmosphere is generally humid and on the north side there were many ferns, mosses and lichens.

On this sunny day, the quarry garden was a quiet, peaceful wonderland and we left it with regret.

FORUM

An open forum took place after dinner. There were four slide presentations. Daphne and Maurice Everett reported on a trial of various composts, some peat-free. Their informative report will be published, possibly in a forthcoming *Bulletin*. Eileen Petterssen described some favorite Norwegian plants and Dorothy Warner showed slides of Northumbria and Glencoe. Richard Canovan described his experiences in growing some less usual heathers in his garden in Swindon. The soil of his garden is alkaline but he successfully grows outside *E. bergiana* × *spiculifolia*, *E.* ×*krameri*, *E. bocquetii* and *E. manipuliflora* 'Don Richards'. I hope Richard will publish a fuller account.

MONDAY

So all this brought Monday! Those who had brought plants had swapped them by now. The Conference organiser, Phil Joyner, who had done all things well, had finished chasing hotel problems and rounding up stray members and was looking positively relaxed. Suitcases had been packed and loaded, cars were revving and the Conference ended to sounds of "God speed", "Farewell" and "See you next year" – in Cheshire.

ALLEN HALL

BOOK REVIEWS

COPELAND, L. I. & ARMITAGE, A. M., 2001. *Legends in the garden. Who in the world is Nellie Stevens?* Atlanta, Georgia: Wings Publishers. Pp xiv, 194. Price US\$ 24.95. ISBN 1-930897-08-1. (Can be ordered via www.greenleavespress.com)

This is a history of how some plants got their names, and the individuals and places, all American, after which they were named. *Erica* ×*watsonii* 'Dorothy Metheny' is included. It's the only heather, but the many other plants make an interesting selection — *Hosta sieboldiana* 'Frances Williams', *Rhododendron* 'Alexander', *Rosa* 'Blush Noisette' and *Phlox* 'Chattahocee', are a few examples.

Mrs Metheny's heather is not, of course, American. It was found on Hartland Moor, Dorset, during the Society's 1979 Annual Conference held at Weymouth, which Mrs Metheny attended. The cultivar was registered (no. 52) and named in 1987 by one of the Society's late presidents, Major-General Pat Turpin. I looked up Arnold Stow's account of the Weymouth conference (*Yearbook of The Heather Society* **2** (9): 5–8 (1980)) but there is no reference to the discovery of this plant; while he relates that some members "tackle[d] the bog areas of Hartland Moor in order to view *Erica ciliaris* and *E. ×watsonii* in their natural habitat", the finding of a pale lilacflowered, eglandular plant did not get a mention! I wonder who spotted it first? Can anyone remember?

E. Charles Nelson

WRIGHT, S. J., 2001. *Bretton, The Beaumonts and a bureaucracy. A West Yorkshire estate in the eighteenth and nineteenth centuries.* Wakefield: Wakefield Historical Publications. Price UK£ 9.99. ISBN 0-901869-43-0.

Mrs Diana Beaumont (1765–1831) is commemorated in a number of plants including the sumptuous tropical genus *Beaumontia* and in one Cape heath, *Erica beaumontiae*. Bretton Hall and its surrounding estate, which now forms part of the campus of the University of Leeds, was her home. There, among other works, she had built an extraordinary bell-shaped, iron and glass conservatory, 70 feet in height and some 100 feet in diameter, in which, presumably, grew a remarkable collection of tender, exotic plants. Sadly, Dr Wright is obliged to note that the precise location within the estate of this horticultural "extravaganza", which was "the talk of the County if not of the Country", remains a mystery.

Diana, whose portrait is reproduced in this book, was a remarkable and very wealthy lady. She spent lavishly, expending vast sums on both the house and the garden, but after she died her son, Thomas Wentworth Beaumont, began "a violent and wasteful programme of destruction of all his mother's work in and around Bretton Hall." The great conservatory was not exempted; it was demolished and presumably all the plants were also either neglected or destroyed.

Dr Wright's book is essentially a detailed history of the landscape park of Bretton Hall. Alas there is no mention of *Erica beaumontiae* nor are there any clues to how and why Diana Beaumont's name was attached to that heather.

E. Charles Nelson

PRESTON, C. D., PEARMAN, D. A. & DINES, T. D., 2002. New atlas of the British and Irish flora. An talas of the vascular plants of Britain, Ireland, the Isle of Man and the Channel Islands. Pp xii, 910. ISBN 0-19-851067-5.

This gigantic book, weighing more than 4 kilos, and containing nearly a thousand pages, is the last (? latest) word on plant distribution patterns in the Celtic Archipelago — as the politically correct title has it "Britain, Ireland, the Isle of Man and the Channel Islands". It is for the dedicated plant enthusiast and academic, because it costs around £100. It comes with a "free" CD-ROM on which all the maps are included, plus many that are not printed in the actual atlas. The BSBI members and other who contributed to it are to be congratulated on a splendid piece of collaborative research. OUP must also be congratulated for the handsome tome which it has produced, far superior to the much-loved original edition. We will reserve comment on the heather content for the next Yearbook. ECN

RECENT PUBLICATIONS

BROWN, N. & BOTHA, P., 2002. Smoking seeds: An updated list of fynbos species with seeds that have a good germination response to smoke. *Veld & flora* 88: 68–69. Lists 31 South African *Erica* species with positive germination after smoketreatment.

CLEEVELY, R. J. & OLIVER, E. G. H., 2002. A preliminary note on the publication dates of H. C. Andrews' *Coloured engravings of heaths* (1794–1830). *Archives of natural history* **29**: 245–264.

An account of this major work on Cape heaths (*Erica* spp) produced during a period that such plants were fashionable. The first volume (1794–1802), originally published in parts, contained the author's explanation and a dissertation on the history and cultivation of these species. Examination of dates engraved on the plates and other evidence indicates that the following publication dates apply to *Coloured engravings of heaths*: volume I 1794–1802; volume II "1805", volume III "1809" and volume IV 1810–1830, but these are subject to further work.

CRONK, Q. C. B. & FULLER, J. L., 2001. *Plant invaders. The threat of natural ecosystems.* London & Sterling, Virginia: Earthscan Publications. Price UK£ 24.95. ISBN 1-85383-781-4.

Includes *Erica lusitanica*, an invader in New Zealand, aided by a seed-bank of more than 480,000 seeds per square metre! Other heathers mentioned are *E. arborea* and *E. azorica* (*sic*).

ELPHINSTONE, M., 2002. *Hy Brasil. A novel.* Edinburgh: Canongate. Pp 438. ISBN 1-84195-247-8.

It is not often we get a chance to include a work of fiction – in fact this entry may be unique. Margaret Elphinstone's novel is set on a "near-mythical" island in mid-Atlantic, where (not surprisingly) there are tree heathers! *Erica hybrasiliensis* blossoms in July and cohabits with birch and alder on the steep slopes of the island's active volcano. I enjoyed this "romantic" romp, replete with smugglers, corrupt politicians, and a happy ending. Wonderful deck-chair (in the Azores!) or fire-side reading. You won't, I wager, find any other book containing an accurately (but invalidly!) named, utterly fictional heather (pp 347–348).

FENNANE, M. et alii, 1999. Flora pratique du Maroc. Volume 1. Travaux de l'Institut

Scientifique, série botanique, no. 36. Rabat.

Includes *Calluna* (p. 449) and *Erica* (no. 449–451). Heathers represented in this northwestern corner of Africa are *Erica arborea*, *E. australis*, *E. ciliaris*, *E. erigena* (listed as *E. herbacea* subsp. *occidentalis*), *E. multiflora*, *E. scoparia* subsp. *scoparia*, *E. terminalis* and *E. umbellata*.

GROVE, A. T. & RACKHAM, O., 2001. The nature of Mediterranean history: an ecological history. Yale University Press: New Haven & London. ISBN 0-300-08443-9. Heathers *en passant*, their role in fires, etc.

HITCHCOCK, A., 2002. *Erica* 'Gengold' – the golden hybrid. *Veld & flora* **88**: 88–89. History of the cultivar, with colour picture.

KIGER, R. W., TANCIN, C. A., BRIDSON, G. D. R., 1999. Index to scientific names of organisms cited in the Linnaean dissertations together with a synoptic bibliography of the dissertations and a concordance of selected editions. Pittsburgh: Hunt Institutes for Botanical Documentation.

Erica, pp. 81–82. An important index to Linnaeus' less familiar taxonomic publications.

OLÍVER, E. G. H., 2002. In memoriam: Dolf Schumann 1918–2001. *Veld & flora* 88: 45. A tribute to Dolf Schumann, one of the authors of *Ericas in South Africa* (1992).

OLIVER, E. G. H. & OLIVER, I. M., 2002. The genus *Erica* (Ericaceae) in southern Africa: taxonomic notes 1. *Bothalia* **32**: 37–61.

The first instalment of a major review of *Erica* in the progress of which the Olivers will reconsider the status of every species. In this paper 11 species are reduced to synonymy, and just a single new one is described, *E. petrusiana*.

SCHÄFER, H., 2002. *Flora of the Azores. A field guide.* Margraf Verlag: Weikersheim. ISBN 3-8236-1368-5.

A photo-guide with not especially good pictures of *Daboecia azorica*, *Erica azorica* (= *E. scoparia* subsp. *azorica*) and *Calluna vulgaris*. A good guide for a casual visitor.

WARTENBERG, S., 2001. *Calluna* varieties in comparison. *GB Das Magazin für Zierpflanzenbau*, nr. **2**: 26–28.

Report of trial of Calluna cultivars in Dresden, 1999–2000.

Supplement to International register of heather names – III (2003)

Registered cultivars

African Fanfare — Erica 'African Fanfare' [established here]

Registered on 1 November 2002 by D. J. Small. Registration no. 180

- * Flowers produced in dense cylindrical clusters; 5–8 flowers per shoot; corolla c. 2cm long, tubular, translucent, white at base shading to rich beetroot-purple (H13) at lobes, paler on shaded side; ovary densely hirsute; July–November (in cultivation in northern hemisphere).
- d Hybrid of uncertain and unknown origin, grown in Europe and Australasia under various incorrect names including *E. doliiformis*, *E. linnaeoides* and *E. persoluta*.
- Wearbook of The Heather Society 2003: 54 [this issue].
- Yearbook of The Heather Society 2003: 54 [this issue].
- i The name has no particular significance apart from indicating this is a hybrid derived from African (Cape) species.

Chanell— Erica carnea 'Chanell'

Registered on 10 June 2002 by W. Slegers. Registration no. 170

- * Flowers heliotrope (H12); February–April; foliage green; habit broad, spreading, compact, to 15cm tall.
- d Chance seedling (parentage not known): found in a plastic propagation tunnel in 2000 by W. Slegers, Soerendonk, Netherlands.
- Ericultura 127: 8. (December 2002)
- ▲ Ericultura 127: 16. (December 2002)
- i A compound name, named after the finder's cousin, Chanel Liplijn, and sister-in-law, Nelly Stevens-Bogers.

Cleopatra — Calluna vulgaris 'Cleopatra'

Registered on 15 December 2002 by Johannes van Leuven. Registration no. 187

- * Bud-blooming; flowers bright red (hellrot) September-November; foliage dark green; habit dense, compact.
- d Deliberately bred seedling; selected October 2000 by Johannes van Leuven.
- i Fantasy name.

Dreinullvier — Calluna vulgaris 'Dreinullvier'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 182

- * Bud-bloomer, September–November: calyx lilac (H3); foliage mid-green; habit broad, bushy.
- d Deliberately bred seedling; raised by K. Kramer in 1991 (sister-seedling of 'Fritz Kircher').
- i The name comprises the German words for three (drei), zero (null) and four (vier) (304 was its nursery code).

Gelderingen Gold — Erica carnea 'Gelderingen Gold'

Registered on 29 October 2002 by J. G. Flecken and G. van Hoef. Registration no. 179

- * Flowers crimson (corolla H13), February–April; foliage yellow-green in summer, with a bronze tinge in winter; habit broad, spreading.
- d Seedling; selected seedling from a deliberate cross between 'Foxhollow' and 'Myretoun Ruby' made by H. M. J. Blum (Steenwijkerwold, Netherlands) in 1984.
- Ericultura 127: 8. (December 2002)
- i Gelderingen is the part of Steenwijkerwold where Herman Blum lives.

Golden Ellena — Calluna vulgaris 'Golden Ellena'

Registered on 6 October 2002 by Eckart Berndt. Registration no. 174

- * Bud-bloomer, September–October; calyx lilac-red; outstanding yellow foliage in summer turning orange in winter; habit broad, spreading.
- d Sport on 'Marleen'; found by Eckart Berndt in his nursery in 1998.
- i Named after Eckart Berndt's daughter, and alluding to the foliage colour.

Johnny Boy — Daboecia cantabrica 'Johnny Boy'

Registered on 1 October 2002 by J. Flecken. Registration no. 173

- * Flowers single, calyx green, corolla heliotrope (H12); June–October; foliage dark green; habit broad, spreading-erect, very tall.
- d Chance seedling; found by Jos Flecken in 1998 in his garden at Kerkrade, Netherlands.
- Ericultura 127: 7. (December 2002)
- i Named after John Doveren, son-in-law of finder, who is married to Colette Flecken after whom *Calluna vulgaris* 'Colette' was named.

Klaudewi — Calluna vulgaris 'Klaudewi'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 181

- * Bud-bloomer, September–November: calyx white; foliage bright green; habit upright.
- d Deliberately bred seedling: raised by K. Kramer in 1991 (sister-seedling of 'Alicia').
- i A composite word, without meaning.

Klausi — Calluna vulgaris 'Klausi'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 183

- * Bud-bloomer, September–November: calyx white; foliage bright green; habit upright, compact.
- d Deliberately bred seedling: raised by K. Kramer in 1991 (sister-seedling of 'Alicia').
- i A composite word, without meaning.

Loni Kircher — Calluna vulgaris 'Loni Kircher'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 186

- $* \quad \text{Bud-bloomer, September-November; calyx lilac (H1); foliage mid-green; habit broad, bushy.} \\$
- d Deliberately bred seedling; raised by Kurt Kramer in 1991 (sister-seedling of 'Fritz Kircher').
- i Named after Mrs Loni Kircher, wife of Fritz Kircher, President of Gesellschaft der Heidefreunde. This cultivar should not be confused with *C. vulgaris* 'Loni' which is also named after Mrs Kircher, and which is not a bud-bloomer.

Melanie Select — Calluna vulgaris 'Melanie Select'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 184

- * Bud-bloomer, September–November: calyx white; foliage bright green; habit broad, bushy.
- d Sport on 'Babette'; found by K. Kramer in 1998. "Feiner als 'Melanie'".

Moonshine — *Erica* × darleyensis 'Moonshine'

Registered on 10 October 2002 by John Hall. Registration no. 175

- * Foliage glowing bright yellow throughout the year; does not turn bronze in the winter; flowers shell-pink (H16) darkening to pink (H8), November–April; habit bushy.
- d Sport on 'Darley Dale'; found in 1996 by Mike Ayres (Production Manager), Windlesham Court Nursery.
- Yearbook of The Heather Society 2003: 72 [this issue].
- i Named by Mike Ayres; the name alludes to the plant's "bright yellow glow".

Nofretete — Calluna vulgaris 'Nofretete'

Registered on 15 December 2002 by Johannes van Leuven. Registration no. 189

- * Bud-blooming; flowers dark red later paler, September November; foliage dark green; habit open erect.
- d Deliberately bred seedling; selected October 2000 by Johannes van Leuven.
- ☐ Ericultura 127: 19. (December 2002)
- i Fantasy name.

Otto - Erica ×krameri 'Otto'

Registered on 13 October 2002 by K. Kramer. Registration no. 176

- * Flowers June–November; calyx rose-pink; corolla rose-pink, cup-shaped, with sides parallel and without noticeable constriction below lobes, 4.2 mm; ovary squat, obovoid, 1.3mm long, 1 mm across; filament 1.5mm long, anther 1 mm long; style (when not malformed) 6mm long. Leaves mid-green, (2.5)–3.8–(5.7) 0.6–0.8mm; petiole ± 0.65mm long.
- d Seedling; a deliberate cross between E. spiculifolia and E. carnea in 1987; raised in 1990; selected and named on 28 September 2002 by Kurt Kramer, Anne Biermann and Susie Kay.
- Ericultura 127: 23 (December 2002); Yearbook of The Heather Society 2003: 73 [this issue].
- i Named after the German comedian, Otto Waalkes.

Purple Blum — Daboecia cantabrica f. blumii 'Purple Blum'

Registered on 39 October 2002 by J. G. Flecken and G. van Hoef. Registration no. 178

- * Corolla purple (RHS Chart 82A), calyx green; flowers erect; June–October; foliage dark green; habit erect.
- d Chance seedling; found in 1983 by H. M. J. Blum (Steenwijkerwold, Netherlands).
- Ericultura 127: 7. (December 2002)
- i From the flower colour and the finder's surname.

Rudi — Erica ×krameri 'Rudi'

Registered on 13 October 2002 by K. Kramer. Registration no. 177

- * Flowers June–November; calyx rose-pink; corolla rose-pink, urn-shaped with slight constriction below lobes; ovary top-shaped, 1.6 mm tall, 1 mm in diameter; filaments 2.0–3.0mm long, with s-shaped bend at tip, anthers held just below corolla lobes, 1 mm long, lobed; style (when not malformed) to 5–6mm long, long-exserted. Leaves mid-green, (4)–5.5–(6) 0.6–0.8mm; petiole ± 0.8mm long.
- d Seedling; a deliberate cross between *E. spiculifolia* and *E. carnea* in 1987; raised in 1990; selected and named on 28 September 2002 by Kurt Kramer, Anne Biermann and Susie Kay.
- Ericultura 127: 23 (December 2002); Yearbook of The Heather Society 2003: 73 [this issue].
- i Named after the Dutch comedian, Rudi Carrell.

Sphinx— Calluna vulgaris 'Sphinx'

Registered on 15 December 2002 by Johannes van Leuven. Registration no. 188

- * Bud-blooming; flowers pale pink September November; foliage bright green; habit open erect.
- d Sport on 'Marlies', found by Johannes van Leuven; selected in October 2000.
- Ericultura 127: 19. (December 2002)
- i Fantasy name.

Theresa — Calluna vulgaris 'Theresa'

Registered on 8 July 2002 by Kurt Kramer. Registration no. 171

- $\hbox{$*$ Bud-bloomer; August-December; calyx red; foliage yellow; habit bushy, broad.}$
- d Sport on 'Sandy'; found by Paul Wolf (Seligenstadt, Germany) in September 1999.
- i Named after the finder's grand-daughter.

Toothill Mustard — *Erica manipuliflora* 'Toothill Mustard' [established here] Registered on 23 July 2002 by R. Canovan. **Registration no. 172**

- * Foliage mustard-yellow becoming brighter by June fading to golden green by early summer; stems red. Flowers heliotrope with lilac-pink calyx; September–October.
- Wearbook of The Heather Society 2003: 24 [this issue].
- ▲ Yearbook of The Heather Society 2003: 24 [this issue].
- i The spring foliage colour is close to oil-seed rape; but with the old foliage being greenish and the red stem it looks like mustard pickle.

Tweety — Erica ×darleyensis 'Tweety'

Registered on 24 December 2002 by J. G. Flecken. Registration no. 190

- * Bright golden foliage, orange tinted in winter; does not flower freely; corolla magenta (H14), calyx green; November April; habit broad, spreading.
- d Sport from 'Kramer's Rote' found about 1996 by Arnold Bakhuysen at his nursery (Arnold Bakhuysen & Zonen) in Boskoop, The Netherlands.
- ☐ *Ericultura* **127**: 7-8. (December 2002)
- i Named by Arnold Bakhuysen after the little baby bird in cartoons, because of the golden foliage.

Vivian — Calluna vulgaris 'Vivian'

Registered on 3 November 2002 by Kurt Kramer. Registration no. 185

- * Bud-bloomer, September–November; calyx white ("grauweiss (wie *E. darleyensis* 'Silberschmelze')"); foliage mid-green; habit broad, bushy.
- a Sport on clone "Kn. 304" (here named 'Dreinullvier'); found in 1999 by K. Kramer.
- i A German girl's name.

OTHER NAMES NEW TO THE REGISTRAR

Eva — Erica ×darleyensis 'Eva'

- * Flowers magenta (H14), January-April; foliage gold throughout the year; 30cm tall, 50cm spread.
- d Sport from 'Kramer's Rote' found by Pépinières Roue-Cadiou, Kerangoue, Plouigneau, France.
- i Under the *ICNCP* (1995) this name cannot be established because of its prior, and continuing, use for a clone of *E. carnea* (see *International register*). However, in 2002 the European Union CPVO granted plant breeders rights to Pépinières Roue-Cadiou for this clone and this is the denomination approved by CPVO. At present the matter has not been resolved and so two *different* heathers are commercially available under this cultivar name.

hybrasiliensis — Erica hybrasilensis M. Elphinstone sp. fabula

- * Summer-flowering tree heather endemic to Hy Brasil; reported as being confined to the slopes of volcanic peaks, in mixed woodland with birch and aspen. Hy Brasil a novel: 348 (2002).
- i Toponym: from Hy Brasil "a near-mythical island somewhere in the [North] Atlantic whose very existence had been a matter of debate as late as the nineteenth century."

 This name is invalid for three reasons: it is not accompanied by a description in Latin; no holotype was designated; and it refers to a fictional plant.

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All material for the 2004 issue of the *Yearbook of The Heather Society* must reach the Editor not later than 31 October 2003.

Articles may be submitted by e-mail.

Corrigenda

Yearbook of The Heather Society 2002, p. 45
Figure 3 is Erica manipuliflora
Figure 4 is Erica multiflora.
We apologise to the authors for this inadvertent error.

DATES OF PUBLICATION OF YEARBOOKS

2000: 19 March 20002001: 13 March 20012002: 25 February 2002

Handy guide to heathers (3rd ed) (2001): 15 December 2001

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